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Petty-June at College

By the Brilliant Satirist

The Diary of
an American
Co-ed

Fish



FISH

1
TUESDAY.—Went to the library to study for this simply poisonous embryology exam. I got so exhausted reading this quite cryptic stuff that I must have dozed, when Professor Blinksoff, the embryology prof., startled me literally for years to come by asking me if I was reading all the books at once.



FISH

3

THEN he began using the paddle as if it was a fountain pen, and, although I snatched it away from him, before I knew it we were both capsized.



FISH

4
THANK Heaven, it was near the shore, so we just waded in. Only I was soaked to the eyeballs and sneezing and what not and positively couldn't study any more for the exam... and so when we walked home Professor Blinksoff gave me a sort of idea what the exam questions would be.



2

HE was frightfully nice, and said he would explain anything I didn't understand, so I said I didn't understand anything at all, and I suggested we get a canoe and go on the lake, where we could talk better. Oh, my! The professor simply had never seen a canoe before. He nearly fell into the lake before we started.



FISH

5

FRIDAY.—I passed embryology!
(To Be Continued)

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Science Traces Many Trades and Arts to the Ingenious Insect

MANY of the trades, industries and arts of man, science has discovered, are practiced by insects. The termites, or so-called "white ants," are architects, and many of their structures, relative to the size of the builders, are incomparably larger and loftier than the towered Woolworth Building in New York. Sometimes they are more than twenty feet high, representing the construction work of centuries.

They are fashioned in various styles, some with domes and others with pinnacles, but perhaps the most remarkable are the buildings of Australian termites, called "mound ants," which are wedge-shaped, with their broad faces always looking East and West. The structures are erected by the termites as

The Sacred Scarab, So Respected by the Ancient Egyptians, Is a Miser and an Indefatigable Worker, Using Its Peculiar Strength to Roll Back a Ball of Earth Many Times Heavier Than Itself.

while they are still in the cocoon state. They attach the leaves which they need for coverings in their nests together by first biting small holes in them, and then unraveling a bit of silk from the cocoon and passing it through the holes and tying it, exactly as rug-makers do. Other ants, known as farmer ants, have their resident of mushrooms and other fungi in their nests, and they look after, fertilize, cultivate and irrigate those gardens exactly as human beings do them.

There is a species of ant called the miner. They are great tunnel builders. Another ant is a dairyman. He has his flock of cattle which he milks. The cows of the dairy ant are a form of plant lice, or aphids. They have a sort of honeydew which comes from glands in their skins. The ants carefully herd and tend to these lice, sometimes driving them up the tender twigs of fruit trees and other plants, and at other seasons of the year keeping them in underground stables. These stables are chambers where the ants have excavated at the roots of trees and plants. The sap in these roots provides the cattle with their nourishment.

Certain ants know how to sew. For needles and thread they use their young

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There are also not soldiers. They go on military raids practically every day during the summer. Spies are sent out in advance, singly or in small bands. When these spies have found a strong nest they examine it carefully, to learn all its entrances. They return, report to the leaders, and the army gets in motion. The soldiers are closely escorted. There seem to be no real officers, but the spies are constantly running back and forth, aiding in directing the line of march. A few of the soldier ants march on each side, seeming to have the duty of protecting the flanks, but they have nothing to do with leadership. The ants march very

The Deadly Tarantula. Not Only Invented the First Hinges for a Swinging Door, But Also Was One of the First Creatures to Take Up Digging Wells.

rapidly. They cover, in proportion to a human soldier's progress, twenty-five miles an hour. They attack like a real army, but the nest, and capture the enemy ants as slaves. The giant of all bees is called the "carpenter bee," and is of solitary habit. Golems and fowls, and even rafters and floor joists of houses invite its operations. It cuts a tubular hole twelve to fifteen inches deep and divides it into a dozen or more chambers, each to receive a single egg and food (a mixture of honey and pollen) for the grub to be hatched therefrom. All the sawdust produced in cutting the hole is stacked by the bee in a heap and mixed with gummy stuff from her mouth. It is used to make the floors that separate the chambers. A ring of the mixture is laid around the inside of the tube, another ring inside of that, and

so on, until a floor is complete. As a final result, there is a series of rooms, one above the other, from the bottom to the top of the tubular shaft, each containing an egg and food. At the bottom is an exit opening, through which the lowliest grub makes its way out when ready to emerge. Through the floors and escape through the already vacated chambers beneath. It was the silkworm that invented the art of spinning and weaving silk. That estimable caterpillar possesses a pair of silk-secreting glands which make up two-fifths of its weight, and in forming its cocoon uses more than 500 yards of the precious fibre. Many kinds of caterpillars are tail-



Carpenter Bees Were the Originators of Chambered Shafts as Pictured in This Enlarged Photograph.

ors, fashioning for themselves odd styles of parents, but most remarkable are the designs of certain species of the Psyche family, which causes themselves in coverings woven entirely of silk, yet in shape resembling so closely the shells of small spiral snails as to be often mistaken for the latter. The bygone "China Mark" caterpillar contrived for itself a diving suit ages before any human being hit upon the idea. Its waterproof outfit, containing a supply of air, is made of cut-out pieces of pondweed leaves sewed together with silk threads. Thus attired, the caterpillar, which is the offspring of a beautiful moth, can stay for months under water. Spiders invented the suspension bridge. Also they originated the art of net making. But the busy "trap-door" spider, commonly called a "tarantula," designed the first spring hinge. It is a well-digger and spins no web; its burrow, in a clay bank usually, is dry, but resembles a well in miniature, with a cover that

snaps shut on a strong silken hinge, closing the opening so neatly as to render it almost invisible. The well-known "tumble bug" is a miner. It digs a shaft three feet deep to receive its eggs, and fills up the hole with animal waste, which serves its offspring as provender.

Many other kinds of beetles have a similar mining habit, the most notable of them being the scarab, which, by the ancient Egyptians, was regarded as sacred. The ball which it rolls about with its hind legs, perfectly spherical and sometimes as big as a man's fist, was looked upon as an emblem of the sun.

It used to be supposed that the "tumble bug" contained the eggs of the sacred beetle,

but that notion has been disproved. The creature digs a deep shaft, rolls the ball into it, lays eggs upon it and covers it up. By the time the young emerge hatched from the eggs have eaten the last of the food thus provided they are full-grown grubs, and, after passing through the pupa stage, they emerge as scarabs. The first paper makers were wasps, the material they used for the purpose being wood pulp. To furnish the pulp the insect looks for a well-seasoned wood. An old fence is an excellent source of supply. The wasp scrapes off a little of the wood with its jaws and flies away with a pellet of it. Arriving at the communal nest that is in process of construction, it mixes the chewed wood with gummy stuff from its mouth and applies it thinly. Then it goes back for more. The home of a wasp colony must, of course, be weatherproof, and a nest that hangs in a tree will be found on examination to have an outer wall much like cardboard.

Now the Aerial Week-End

AIRPLANE traffic is much more common in Europe than it is in the United States. There are several airplane passenger lines, which are used regularly by business men and others traveling from city to city, and now the aerial fliers have made their appearance. They are tiny planes, made by a British company, with collapsible wings, which when folded up reduce the plane to such a small size that it may very easily be put away in a traveling bag.

It is much in use for week-end trips. The accompanying photograph shows Mr. and Mrs. F. F. Rayburn, who not only fly their tiny plane for their week-end trips, but carry in it a collapsible house in which they live near the seashore to which they travel. By means of the collapsible house they can make their home wherever they see fit to land their plane. The little plane costs very little more than an automobile and is as practical and as easy to fly as the larger planes. The Rayburns have been using the flier airplanes, and a company is being organized with a fleet of the planes for a sort of taxi service. It will be very much like the land taxi, except that an taxi will not accept passengers for flights of less than ten miles, at least not in the beginning. The company plans to start business with two scores of the planes, with hangars in London and various points in Great Britain.



Mr. and Mrs. F. F. Rayburn, of London, on Their Aerial Week-End, With a Flier Plane and a Collapsible House, Which Is Stored in the Plane When Traveling.

Ageria's River of Ink

A part of Algeria is a river of ink formed by the union of two streams. The water of one is impregnated with iron, and the other, which drains a great swamp, with gallic acid. Nature, acting as a chemist, unites the contents of iron and acid, and the result is a true ink, with which one can write real letters.

Probably no product in the world is made from a greater variety of raw materials than ink. For centuries past the best grades of writing ink have been made from a certain species of nut galls found in Asia Minor. The gall fly, a small wasplike insect, burrows into soft twigs and deposits her eggs. A lump, sometimes over an inch in diameter, is formed, called a gall. It contains a large amount of tannin, which is the basic substance of inks.

Other ink is made from logwood from the West Indies, or by mixing green vitriol with other tannic solutions. Fountain pen ink is usually made from the black and blue dyes. All colors of inks are made with aniline dyes. Then there is the secret of "sympathetic" inks, which leave no visible marks on the paper when they are used. Some of the favorite secret inks are lead acetate solution, whose invisible turn black upon exposure to sulphurated hydrogen; cobalt nitrate solution, which turns blue when treated with oxalic acid, and cobalt chloride or nitrochloride, which becomes green when heated.

Beauty Compacts Used by Beiles of Prehistoric Times

It is considered rather modern for a young woman to carry in her purse one of the several hundred types of so-called "beauty compacts," which contain the various cosmetic ingredients used by the young women of today. As a matter of fact, although fifty years ago this was rather frowned upon, beauty compacts and cosmetics have a history almost as venerable as language itself.

Dr. Ralph Glidden, the explorer, recently dug up on Catalina Island, off the coast of California, a stone powder pan and round compact which, he says, was undoubtedly the property at one time of an Indian belle of the island. The compact is shown in the accompanying photograph, demonstrated by Miss Lynn Tompkins of Catalina Island.

Think made from flint, bone or ivory, and contained in the stone compact was applied to the face with the "puft," which was dipped into much in the same manner as it is done today. The smooth stone produced the desired shades of color on the face.

Ruins of ancient Egypt, Carthage, Babylon and Ageria reveal a multiplicity of small boxes of wood or ivory, gold or silver, which were in reality compacts containing cosmetics of diverse kinds. They were carved in various ways and loaded with ornamental de-

vices in relief. Sometimes the designs represented the favorite lotus blossom, with its buds and stalks. Other times the decorations consisted of figures of animals—goats, gazelles, fowls, eagles, cats. Many were of considerable length, terminating in a hollow shell, not unlike a spoon in shape and depth, covered with a lid turning on a pin. Some of

these were probably intended to contain small portions of ointment, taken from a large vase at the time it was wanted. Many were made in the form of a royal oval, with or without a handle.

There is hardly a nation in the world today in which the women do not use cosmetics. In the most untravelled interiors of Africa and Asia the women of savage tribes, women who frequently wear no clothing at all, have been found to possess beauty compacts carved out of wood or metal, containing paint, rouge, tattoo materials and other cosmetics. Primitive ornaments and have been found in some of the African villages, usually made of ivory or bone, and used over by a woman.

The plastic surgery of civilized countries is merely child's play compared to the tortures from the Follies Bergere. Today the women of savage tribes in their efforts to live up to the weird standards of the show business are frequently tortured to their deaths, and in many other ways they are deeply defaced and pain to make themselves "beautiful."



Miss Germaine Dulac in Her Striking Worm Costume, in Which She Presents "Worms," an Interesting Novelty at the Follies Bergere in Paris.



Miss Lynn Tompkins, of Catalina Island, Demonstrating the Primitive Beauty Compact Found on the Island by Archaeologists.

Paris Revue Glorifies the Lowly Worm

It is the late bird now in Paris who catches the "worm number," which is the striking novelty of the latest revue of the Follies Bergere, entitled "The Great Folly." The new revue was installed in the famous music hall, which is one of the landmarks of Paris, to celebrate the rebuilding of the structure at a cost of over two million francs, and the new revue itself is said to have cost four million francs. This compares with the cost of its more pretentious New York revues.

Miss Germaine Dulac, one of the featured actresses of the revue, originally in the costume of the latest "worm number," in which Miss Germaine and a chorus of fifty go through a routine of grotesque movements of worms. There have been banyard numbers, zoo numbers, jungle numbers, marine numbers, in which the principals and choristers made up and dressed like fish, and bird numbers galore. But this is the first time in the history of revues that the lowly worm has been used as inspiration for a number. The worm has proved, indeed, this time to a new use.

The worm number, and the revue in general, are the talk of Paris. There are fifteen hundred costumes made especially for the show, and it is claimed by the management that it will require a run of almost a year at capacity to reach the cost of production alone. The show costs more than the sum spent for a dozen similar revues in years gone by. The reason for this lies in the competition of the United States. Once America got its revenge on the Follies Bergere, today it is frequently the other way around. American tourists visiting Paris for the first time and attending the Follies were surprised in years past to find that the show they were attending to, serving at home were more costly, more pretentious than the French revue. Realizing this, the management began to spend more money on their shows, and the price of admission went up accordingly. There have been shows produced in New York which cost from \$300,000 to \$400,000 up to the time the curtain went up on the opening night. The new Follies, by no means the most expensive show ever produced anywhere, is certainly the most expensive ever done in Paris.

Baron Gartner, Dissolute Elderly Rake of Vienna, Exclaims "All Women Are Alike" and Shoots Down in the Crowded Concert Hall the Wilful Egyptian Princess Who Really Loved but Wouldn't Marry Him



There Was a Sound of Five Shots, and Then Princess Dseydsey Staggered Out of the Door Leading From the Lounge of the Concert Hall to the Corridor Behind the Boxes, and There She Collapsed, a Little Heap With White Silk, White Skin, White Pearls and Jet Black Hair—and Died.
But Her Murderer, the Baron, Did Not Escape.

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Poor but Happy for 25 Years—Rich Now, but Miserable

FOR a quarter of a century the Lantz family lived happily together on their farm near Valley Center, Kansas. The twenty-five years together brought them hard work, trials, four children, and a great deal of happiness.

Then, almost overnight, they became wealthy—and miserable. Within a month after their acquisition of riches, Mrs. Lantz died of a heart ailment, leaving Charles, for divorce. Not long ago neighbors gathered on the Lantz farm to celebrate the first steps for drilling oil there. A chicken dinner was served. A proud Valley Center business man presided at a table of prosperity for his little town, and a good number spoke of the pleasure of gathering fruits of life in the favor of the Lantz family. Mrs. Lantz and their four children moved happily through the crowd, speaking friendly words with their old acquaintances, who were so happy over their good fortune.

"They deserve their good fortune," said those who were glad to see them. "They've had trouble and hard times for nearly a quarter of a century. This farm was platted with advantage, which the sale of the oil royalties has paid off. Now they can enjoy life and have peace and plenty."

But less than a month later Alice E. Lantz fled suit for divorce and division of property against her husband in the District Court of Sedgewick County.

In formal legal proceedings the petitions told how the couple married in the City of Good Hope, Okla., December 15, 1902.

It went on to describe how coming to Kansas in 1906 and the purchase of the 100 acres of rich land near Valley Center two years later. Into the fold payment Mrs. Lantz said she had inherited from her father was all paid. Later, in 1921, further payment was necessary, and into this she

Mrs. Alice E. Lantz, of Valley Center, Kansas, who has sued her husband for a Divorce and Division of Their Property, Following the Sudden Discovery of Oil on Their Land, Which Lived There Happy Poorly Into Miserable Riches.

says, she put \$150 she had received from the estate of a sister, and also a large sum left to her by her dead mother. Four children were born to the



The Farmhouse Which Was a Happy, Though Mottaged Home Until the Sudden Wealth Disrupted It.

Charles E. Lantz, as He Appeared Before the Oil Was Discovered.

union, the petition says. Mrs. Lantz found it necessary to work on the farm, to prepare butter and poultry for the market, that she might meet

expenses. The children had to have clothing and school books. Sickness came to the family and doctor bills had to be paid. Lantz, she claims, neglected to most any of these expenses, although he was strong and able-bodied. Mrs. Lantz went on to explain the trouble and tribulations of her 25 years of wedded life, as well as her periods of happiness.

* She asked for and received a court order restraining her husband from coming onto the premises or interfering with the management of the children and the farm. A carefully worded piece of the order gave her absolute control of the oil right and restrained Lantz from either selling, renting or otherwise disposing of whatever right he might have in the farm, pending action on the divorce and determination of Mrs. Lantz's interest in the land.

The neighbors do not know what is the most surprising—the sudden pros-

perity of the Lantzes, or their sudden unhappiness.

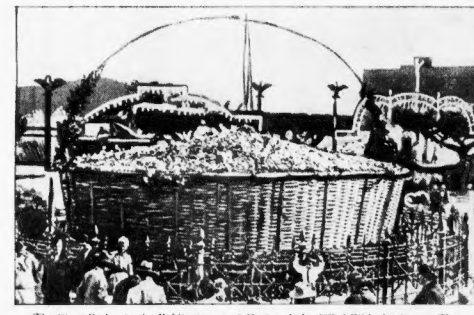
During those long, lean years of toil and limited means, there was no suspicion of a quarrel. An iron together happily, their main thought being the eking out of enough to properly rear their children. Lantz was known to others of the community as a good-natured, kind and steady man. His wife was a good housewife and an able helpmate in the work of the farm. They often came to town together, and were most considerate of one another. Then oil was struck on the Lantz farm. Oil dealers docked around to buy shares. They sold considerable, for a large sum, but retained a portion of their property for themselves.

When the news of Mrs. Lantz's divorce action became known, there was a great deal of conjecture concerning the cause.

"Lantz was a good husband," neighbors go, but he wasn't a business man," remarked one of the many who wondered about the divorce. "Mrs. Lantz had twice the head for management that he had, back in the days when they took smart judgment to get along. Now that she has money, she is afraid that he will lose it in one way or another, and put them back where they started. Maybe she's right."

And if the well—despite all predictions—turns out to be a bonanza, there may be a severed family reunion.

Free Wine for Everybody in Marino Where It Flows from a Public Fountain

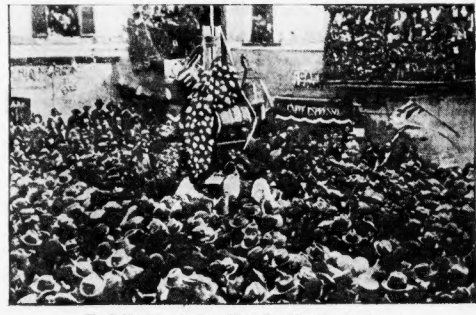


The Giant Bucket in the Public Square of Marino, Italy, Filled With the Grapes That Will Supply the Wine for Next Season's Festival.

HERE is a suggestion for American tourists, those who are fond of wine, but happen to be law-abiding and wishful to obey the law of the land. Go to Italy this year. And when you are there, be sure to visit the picturesque little town of Marino. It lacks the celebrated ruins that have made Rome famous as a city for students, archaeologists and travelers. It does not possess the night life of Naples. It has not the romantic atmosphere of Venice.

But it has its points. Decidedly, it has its points. Marino is the center of the famous vineyards of the Roman Campagna. Every year, as far as the memory of its oldest inhabitant extends, the wine-harvest has taken place there in the manner of ancient custom. In the market place at Marino there is set up each year a giant bucket which is filled to overflowing with the choice grapes of the section, tons and tons of grapes destined to be crushed so that their juicy juice may be turned into wine.

Nearly as a fountain set up in connection with the wine-cellar of the town. On harvest day, when the festival is held, the wine made from the grapes in the huge basket flows for an hour, like water. It is free. Everybody in town may come to the fountain and drink as much of the wine as he or she wishes. And the same lovely courtesy is extended to visitors. It is not a cheap grade of wine, which is thus heartily given away, but one of the best wines for which the section is famous.



The Public Fountain from Which Free Wine Flows in Marino, at the Annual Vintage Fete.

Dressed as a Man, Worked as a Bootblack to Pay Her Way in College

MISS LOUISE LYON, a pretty coed of twenty-four years, had worked her way through the first two years of her course at the University of Wisconsin, at Madison, Wis. When she returned this year from her home in Glenwood, Iowa, she planned to work intensively during the first semester and then enter the university at the start of the second semester in February.

But about that time a local barber shop advertised for a bootblack and porter. Miss Lyon is a strong, healthy girl, and was not particularly looking for a "suds" job. She applied for this job and was hired. With her hair cut short and wearing knickerbockers, Miss Lyon was not conspicuous and only a few of the regular patrons knew she was a girl. Then the news of her new occupation drifted to the offices on the campus where at the desks with their involved problems of what girls should and should not do.

Most decidedly the opinion of the faculty was that a job of porter and bootblack in a barber shop was not the proper vocation for a young girl. There had been a day when the barber-shop was considered almost on a par with the corner saloon as a strictly male institution. Respectable women would not come enter a barber-shop that they would venture into a pool parlor. But hushing of hair changed all that. The women began to frequent barber shops as much as the men. Like the colleges, barber-shops became co-ed institutions. There were some barbers who recognized that hussifying for women was more lucrative than hussifying for men, and they specialized on this sort of work.

But this particular tenuous parlor was of the old-fashioned type. Women did go in once in a while to have their hair bobbed. But for the most part the clientele was male. A good many travel-



Miss Louise S. Lyon, the University of Wisconsin Co-ed Who Put On Trusser, Cut Her Hair, and Worked as a Bootblack to Pay Her Way in School, Until the Authorities Made Her Quit the Job.

Miss Lyon cannot say why she transgressed any rule of deportment by her barber-shop work.

"I tended fairs, swept the floor and did all the porter work," she says. "I wore the boy's clothes because then I would be noticed less and I didn't care to get much attention."

Dean of Women E. Louise Nardin, however, stands ready to defend her stand in making Miss Lyon quit her job.

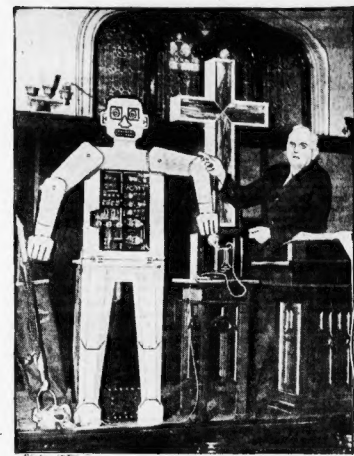
"I am inclined to lower the dignity of the female student body and was entirely unfit for a girl," Miss Nardin characterized the bootblack profession which Miss Lyon had temporarily adopted.

Miss Nardin has become the spokesman of the university in the case of Miss Lyon and she has the backing of the rest of the university. Other university authorities have been bombarded with questions relating to freedom and dignity of labor without an answer and even President Glenn Peck has not said anything to date concerning the Lyon case.

The new ruling by the dean is getting a record amount of discussion among the State's 10,000 seekers of higher knowledge. It is one more "thou shalt not" but none of the other prohibitions affected in any way a girl's chance to earn her way through school. Miss Lyon may find another job that will pay university membership, but it is certain to be less lucrative than the work in the

Mechanical Men To Do The World's Monotonous Drudgery?

Slip a Cylinder Into the Steel Skull of "James," the Robot Butler, or "Marie," the Mechanical Kitchen Maid and, It Is Possible That Mankind Will Be Able to Escape from the Humdrum Tasks Nobody Enjoys



A Mechanical Clergyman Introduced By the Rev. C. F. Reisser From the Pulpit of the Chelsea Methodist Episcopal Church, New York.

A FEW weeks ago, when a mechanical contrivance looking somewhat like a man but more like one of the mechanical Robots of fiction got up in London and spoke in a cultivated, human-like voice to open an exhibition, it is probable that thousands of men and women telling away in households or factories all over the world read the news with a sigh and wondered if such things were possible. Could science succeed in perfecting mechanical men or women to do the tasks which the world's needs demand but which are irksome or dangerous for living men or women?

So far as the possibility is concerned the answer is yes. Not only did the London Robot perform successfully enough the duties of a chairman opening a meeting, but that same city possesses another Robot, built on a different principle and operated by light rays which carry the orders of its human master to a small, sensitive disk on its chest, like a scientific kind of eye.

And in the United States Mr. R. J. Wensley, of the Westinghouse Electric and Manufacturing Company, has perfected still another kind of Robot, which can hear and respond to three separate musical tones, and which has carried out successfully enough the motions and duties of a chairman of a meeting, and even of a preacher in a pulpit, for one of the appearances of this American Robot, called the Televox, was in the pulpit of a New York City church.

But all three of these Robots, like the equally ingenious mechanical chess players and automatic musicians and other devices with which the history of mechanism has been adorned for more than three centuries, can do nothing but carry out the orders of their human directors. When the London opened the exhibition in London its master and constructor, Captain W. H. Richards, had to stand beside it and touch the proper switch at the proper moment or otherwise direct it by hand and hand and other act. When the Robot spoke it was in Captain Richards' voice, or the voice of some other human being, and the robot into the mechanical throat of the Robot by radio or by wire.

When the Televox of Mr. Wensley occupied the New York City pulpit Mr. Wensley was there himself to issue the successions of musical tones in response to which the apparatus performed a set of prearranged tasks. The Televox, too, can be equipped with a voice, so that it can be used in reply to questions, but the same limitations apply. Either some human intellect must be at hand to do all the thinking and directing, as the Polish scientist who had lost his legs occupied secretly the middle of one of the famous chess playing automata of previous years, or else the tasks which the Robot is to do must be carefully worked out in advance and the machine adjusted to them and for them only. Obviously, this is a far cry from a mechanical man, one whom the world may turn over safely duties not desirable for living men.

Captain Richards and the other friends of the Robots urge, however, that the present is only a beginning. Radio was not foreseeable, they say, when Marconi sent the first feeble impulses through the ether. The telephone was doubted for years after Professor Bell and Mr. Watson succeeded in exchanging the first intelligible words over a wire. Perhaps ways can be devised, these enthusiasts say to provide Mr. and Miss Robot with substitutes for brains, so that they can really carry out not too complicated jobs by themselves.

A scientific man suggested not long ago that aged and feeble balloons might be trained sufficiently to permit their being used for servants. It would probably be just as easy, the Robot advocates say, to train a machine as to train a balloon. Suppose, for example, that a household could be equipped with mechanical housemaids and cooks and butlers, each dressed in the proper fashion for each, and each provided with special sets of mechanical brains so that a limited series of tasks could be carried out. The butler might possess, for example, a dozen sets of brass or celluloid, each capable of being inverted, when desired, into the Robot's head. On each cylinder would be a list of household duties to be performed. One cylinder to cover the serving of a dinner, for example; another cylinder to enable the butler to answer the door in its master's absence and give proper responses to persons inquiring for him.

Similarly, the mechanical housemaid could have brain-cylinders specially arranged for a series of household duties: one directing the sweeping and dusting of the parlor; another controlling the necessary motions for making all the family beds, and so on. The cook makes the eyes roll sideways, and so on. A separate electric circuit controls electric lights behind the eyes, which can be flashed on or off by the operator. Still other control circuits operate the voice mechanism, which can be made to repeat words spoken at a distance by the human operator, as is done by a loud-speaking telephone, or can be made to operate a phonograph record which provides the voice. The Westinghouse company, more modern still, for its voice is provided by a strip of motion picture film like the one used in the new talking movies, on which has been recorded in advance the words which the device is



The Mechanical Woman Whose Exports Were Shown in a Recent Movie.

Robot Playing Bridge at a Pasadena, Cal. Lawn Party. The Non-human Gentleman Stood Respectfully Because He Did Not Happen to Have Any Sitting-down Machinery.

The only thing that the poor creature could not have done was to change that pre-arrangement. If a Robot were an after-dinner speaker and the previous speaker talked too long or said the wrong thing, no readiness would be possible. It is a limitation of the most complicated and perfect mechanical muscles and mechanical brains that man has devised that they must either have a human master at hand to order every one of their steps or must follow rigidly a sequence of things arranged in advance. If the mechanical cook, for example, burned the roast or had the fire go out in the furnace,

nothing would be done to correct the fault. With a Robot everything must go right or everything will go wrong. The two London Robots and Mr. Wensley's Televox are also in charge to be operated, second by second, by the orders of their masters. Captain Richards' Robot contains an electric motor which runs continuously when the Robot is in operation. The motor drives a rotating roller, like the roller of a typewriter. Against the roller wheels can be pressed, so that when the pressure is applied the wheel is driven by friction on the roller. The necessary pressure can be applied or released by an electromagnetic, controlled by electric current, entering the base of the Robot through wires, which can be turned on or off at will by the operator.

One of these wheels controls the levers that make the Robot stand up or sit down. Another controls the head from side to side. A fourth makes the eyes roll sideways, and so on. A separate electric circuit controls electric lights behind the eyes, which can be flashed on or off by the operator. Still other control circuits operate the voice mechanism, which can be made to repeat words spoken at a distance by the human operator, as is done by a loud-speaking telephone, or can be made to operate a phonograph record which provides the voice. The Westinghouse company, more modern still, for its voice is provided by a strip of motion picture film like the one used in the new talking movies, on which has been recorded in advance the words which the device is

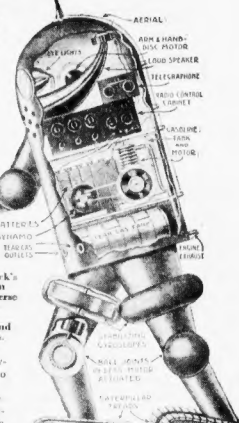
Mr. Hugo Gernsback's Police Automaton Designed to Disperse Mobs by Arise, Provided with Whirling Clubs and Tear Gas Sprays.

To repeat on receiving the signal to start. Another of the recent Robots is a controlled by radio waves.

These are not, however, the Robots that science considers the most important. The real Robots, the ones that promise to take over the drudgery of mankind, do not look like men or like Robots. They resemble precisely what they are: that is machines. While the imaginative novelists have been watching down the road of the future for man-like Robots to march up in a vast, iron-fisted army and take charge of war affairs and kitchens and factories, the real mechanical Robots have arrived quietly and unannounced. So far as concerns the use of machines to do work that humans shirk, this is already a Robot Age.

One of the suggestions made by Captain Richards, owner of the London Robot, is that contrivances like this should be used to take up tickets on a railway, thus dispensing with the human conductor. This is so practicable that it has been done: the only difference being that the ticket-taking machines look like machines, not like tireless men. The turnstiles into which entering passengers put their fares, in the New York subway are nothing but ticket-taking Robots. On the Underground Railroad in London there have been installed recently automatic machines by which a passenger can buy for himself a ticket to any part of the line, different fare rates being in force on that system depending upon the distance to be travelled and the class of car to be used.

More complicated still, and far more accurate than human workers, are the

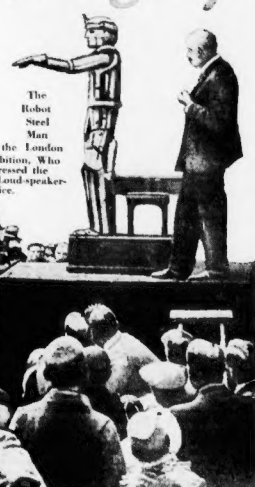


similar ticket-handling and card-sorting machines now used to keep and to analyze statistics in such institutions as the United States Bureau of Census. Thousands of cards, tickets, or other similar articles, once properly indexed beforehand, are sorted, tallied and tabulated by these machines with an accuracy as well as a speed which no human bookkeeper or statistician can equal.

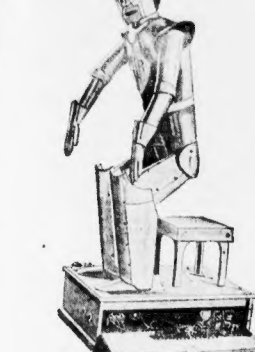
In factories there are still more remarkable machines which will weigh out a pound of salt or soda, make a cardboard box, lift the material into the box, tuck in a pamphlet of directions, wrap and seal the package, put it in a wooden box with eleven others to make a dozen, nail up the box, deliver it to a clerk or even write a check on it, and keep a record of the whole transaction on a counting dial or in a book.

All modern electric lamps are made by similar automatic machines which can blow hot glass or pump air out of the bulbs or handle the delicate tungsten filaments of the lamps with their mechanical fingers far more perfectly, quickly and cheaply than even the best of human hands. Many of these machines are even equipped with devices to shut down their own operations and call for help when something goes wrong like a factory apprentice who realizes that he is up against something for which he needs more expert help.

It is such machines as this, scientists



Photographed at the London Engineering Exhibition, Who Arose and Addressed the Meeting with a "Loud-speaker-like" Voice.



Close-up View of the Robot Who Addressed the London Engineering Society. He Here, Generalized, Flashed His Eyes and Emited Electric Sparks from His Teeth and at the End of His Speech Blowed and Spoke.

believe, which constitute the real Robots of the future; the devices which are to relieve mankind from undesired drudgery. The operation of a telephone exchange is a monotonous, wearying task. Now it is being taken over rapidly by the mechanical and electrical Robots, which constitute the modern automatic exchange; machines whose metal fingers and copper wires brains find numbers for the subscribers far more accurately and quickly than the old-fashioned human operators could do.

Telegraph service has been turned over similarly to the Robots; automatic sending and receiving machinery having replaced the less speedy human operators on nearly all telegraph lines, the business of which is great enough to justify the change.

Even in the higher attributes of the human brain Robots of this kind have intruded, so long as the task set them is one which requires no thinking and which is never changed by circumstance. Professor Vannevar Bush, of the Massachusetts Institute of Technology, has perfected, for example, a calculating machine which will perform some of the most abstruse mathematical calculations in a fraction of the time needed for the same task by a human mathematician, but freeing him for now and more original work which the rigid-minded Robot cannot perform.

Even in the devising of plots for popular fiction, some ingenious inventor constructed some months ago a device for plotting "plots," in which cards on which were printed the basic elements of fiction plots were sorted and resorted by the machine, to obtain the combinations and permutations which the fiction plot requires.

The Robots, then, are not creatures of a distant future. They are creatures of today. Only they do not look like Robots. They are not caricatures of men but helpers of men. The whole development of the mechanical and electric age which has remained the life of mankind so fundamentally during the past hundred years is evidence of the "Robot" power. They are already doing more than three-fourths of the work of the world. It is not impossible that some day they will do all of it that man wants to give up.

A Self-Launching Automatic Life-Boat to Make Sea Disasters Impossible

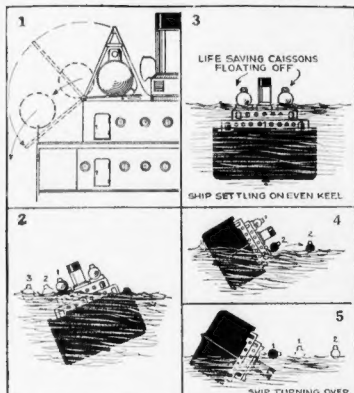


Diagram Illustrating the Various Ways in Which the Life-Pontoon May Be Floated. (1) The Pontoon Rolling Into the Sea in Case of Fire. (2) How the Pontoon Floats Away When the Ship Lists to the Left. (3) Life-Pontoon Floating Off as the Ship Sinks Vertically. (4) How the Pontoon Rises When the Sinking Ship Lists to the Right, and (5) How the Pontoon Takes the Sea When the Doomed Vessel Upsets.

By Hugo Gerardsch,
Member American Electrical Society, American Association for the Advancement of Science.

RECENT marine disasters again have called the attention of the world of science to the need for a new modern lifeboat which cannot be swamped by the open sea, that is not dependent upon a pump or crew for its launching, and that, once launched, will not fall apart.

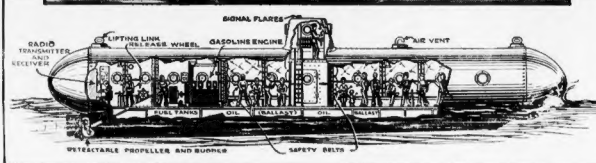
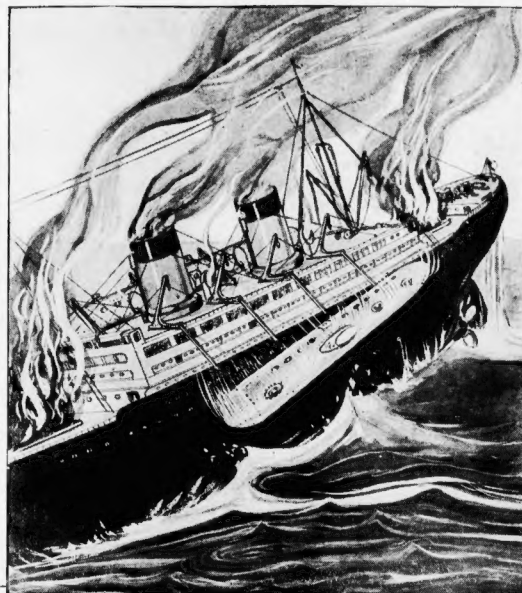
Such a lifeboat may be constructed on plans that I have designed and which are described in "Science and Invention." My idea of a modern lifeboat calls for a pontoon about eighty feet long and about fourteen feet in diameter, the entire craft to be made of steel about an eighth of an inch thick. The pontoon is planned to have buoyancy as well as lightness and strength. It would take care of about 200 persons.

In most cases, such as collision, where the ship sinks, the pontoon need not be launched. When danger threatens, the passengers are made to enter the pontoon, several officers supervising them, so that only a certain number of people will go into one pontoon without overcrowding. Once they are safely inside, the door of the pontoon is locked and bolted, air and water-tight, while the officers see to it that the passengers are strapped into belts provided for that purpose. These are fastened to the inside wall of the life-pontoon, which is padded inside. When

the passengers are safely inside the pontoon the officers make sure it has been disconnected from its fastenings.

How the ship sinks is of little concern. The pontoon will merely float off as the ship settles. It makes no difference whether the ship sinks one way or another, or whether it goes overboard or slides at a steep angle. The minute the pontoon gets in the water, they automatically rise to the surface, and float on an even keel.

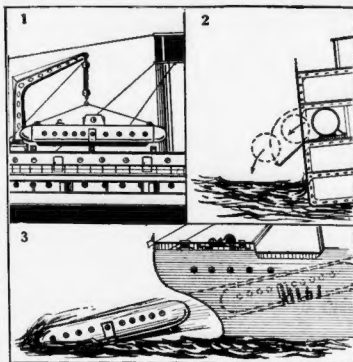
There is a popular delusion that every time a big ship sinks it causes a vortex that sucks down all objects near it. This happens only infrequently, and it is to be doubted that the suction ever assumes great proportions. If, however, an occasional suction occurs and



Cross Section Diagram of the New Life-Saving Pontoon.

Illustration of a Sinking Ship Showing the Launching of the New Life-Boat in an Extreme Case When Fire Breaks Out. Loaded with Passengers, the Pontoon Slides from Its Davits Down to the Sea.

carries the pontoon down, perhaps for twenty feet or so, that will not in the least endanger them, and the pontoon will bob right up to the surface. Of course, while all this happens, the valve that controls the air inlet of the



(1) Diagram Illustrating How the Life-Pontoon May Be Launched With a Crane. (2) Pontoons Stored Between Decks Rolling Free When the List Becomes Acute. (3) Launching the Pontoon From the Side by Dropping It From the Davits.

pontoon is closed by an officer, so that no water can get inside; but just as soon as it comes up to the surface of the water and floats on an even keel, the officer opens up the valve and the air that is needed is rapidly sucked in by a fan.

But this time, a small 20-horsepower gasoline engine begins operating, and the purpose of setting away from the wreck and to avoid colliding with other pontoons.

Of course, when one of these pontoons slides down 30 or 40 feet from the top deck of the ship and plunges into the water things might not be very pleasant in the interior of the life-boat, unless all the passengers were strapped tight by means of life-saving belts. If they are strapped tight against the padded walls, little damage will result.

The life-saving pontoon will, of course, have on board enough food to last for some days, and it will have

other necessities to maintain the life of its passengers and to keep them at least in fair comfort. A good supply of rockets, flares and a small radio transmitter are, of course, most important and all of these can easily be taken care of.

I have no idea at all that these pontoons should have enough motive power so that they will reach the nearest land. That, however, is not necessary, because they are only supposed to save life. Equipped with flares and radio, these pontoons are well built and seaworthy enough to stay upon the water for several days if necessary. By that time, the radio will have summoned help and the passengers can easily be taken off.

We have considered the case of a ship going down with the passengers floating off as the ship goes down. In one instance, this could not be done, and that is if fire breaks out. In this case, it would perhaps not be possible to wait until the ship sank, because long before this all the passengers and the pontoons would be destroyed by the scorching heat if the vessel did not sink at once.

A provision, however, has been made for this emergency also. The pontoons are equipped with two or more rings, which can be engaged by hooks from powerful cranes. The cranes, then, would lower the life-pontoon into the sea. But suppose the crew got panicky or there was not sufficient time to do this. The life-pontoons would simply be disengaged and would be pushed down into the sea.

Island Removes 1200 Year Ban on Women

PARIS, Jan. 2.

FOR the first time in twelve centuries women are about to be admitted as visitors to the Claustral Monastery of White Monks, on St. Honorat island, just off the Riviera coast. No announcement has been made as to why the unexpected permission has been granted.

The life in the monastery and on the island is practically as it was nearly a thousand years ago. There is scarcely any trace of modern civilization.

Not so long ago there was widespread

out of existence another place where no women were admitted. This was the Republic of the Monks of the Holy Mountain of Athos, situated within a few miles of Salonica, overlooking the Aegean Sea. It was one of the oldest, smallest and most picturesque republics in the world. For a thousand years no women had ever been allowed within its restricted walls.

A few years ago a woman from the peninsula of Mount Athos, temporarily employed at Athos in the harvest of the vineyards, smuggled in wives, disguised in loose robes. Both the wives and men workers were angrily expelled. The strange republic was brought to an end by official decree of General Pangalos, the then military dictator of Greece. The Greek government will turn the mountain of self-mortification and abnegation into a pleasure resort.

Girl Claimed by Three "Mothers"

RUDAPEST, Jan. 2.

MARIKA KRAMAZ, twenty-two, a pretty Hungarian girl, is confronted with an unique problem of parenthood. Until her mother told her, just before death, that she was an adopted daughter, she had no suspicion of a mystery concerning her birth. Her real mother, she was told, was an unmarried woman, still alive. Mariska, upon the death of her foster mother, advertised for her real parent. Seven months later, a letter came from Brazil. It was signed by Mrs. Tereza Kramaz. It enclosed a check, and Mariska left Budapest and went to Brazil.

Her "mother" she discovered, was a wealthy widow. But she said little to explain to Mariska, the mystery of her birth. But Mariska continued to live with her, and recently, the newly-found mother died, leaving Mariska a substantial fortune.

When Mariska returned to Hungary, another woman appeared, and claimed to be Mariska's real mother. She is now asking a legal claim for the girl, but in her petition, denies any intention of asking to share Mariska's wealth. She has produced documentary proof, it is said, of parenthood. Just why the third woman delayed so long in setting forth

her claim has not been satisfactorily explained by the woman who has been used in this strange case of the girl with the three mothers.

The woman claims she has not been able to trace the girl until after she had read of her trip to Brazil, and she communicated with her as soon as she returned.

But Mariska, after three explanations, is doubtful, and being of no plans to manage her own affairs without the aid of the new claimant.



Miss Mariska Kramaz, the Young Hungarian Girl, Claimed by Three Mothers.

Germany's Fake Princess Jailed

BERLIN, Jan. 2.

THE masquerade of the German milkmaid who posed as a princess is over. Martha Barth, who convinced the credulous royalists of Erfurt, in the Prussian province of Thuringia, that she was Princess Margaret of Prussia, was convicted the other day of fraud and forgery, and sentenced to prison.

While a number of persons swindled by the fake princess preferred to remain silent during her trial, two elderly spinsters who lost all their savings appeared as the chief complainants. Frau Barth's story was that she was the illegitimate daughter of the former Kaiser's sister, Sophia, who became Queen of Greece after Martha's birth. When only fourteen years old, her story runs, Frau Barth was married to Crown Prince Boris (now King) of Bulgaria. She was soon divorced and finally became the mercenary wife of the German crown prince.

This was her story, and she embellished it with realistic details. She told her victims that her husband, the Crown Prince, had been forced to bore-

row 50,000 marks from an adjutant. The girl made her home with the two spinsters. There she often received allegedly royal visitors for whom the two sisters were delighted to cook meals, especially when they were told that the Crown Prince had been mightily fond of Thuringian dumplings. When Martha received her "princess" visitors the sisters were never permitted to enter the room, but after the visitors left they generally found a note, supposed to have been written by the Crown Prince, in which he asked them to place an envelope with 100 marks under a pillow.

The two sisters gave everything they had and even pawned their belongings in order to help the poor princess of the beloved House of Hohenzollern. When the two sisters lost everything, including their little shop, they followed the princess to Berlin, where they finally located her performing her more accustomed duties in a cowstable. The court proceedings brought out the fact that Martha was in reality the illegitimate daughter of a forester of northern birth, and from him she had probably gotten enough data to carry on her deception.



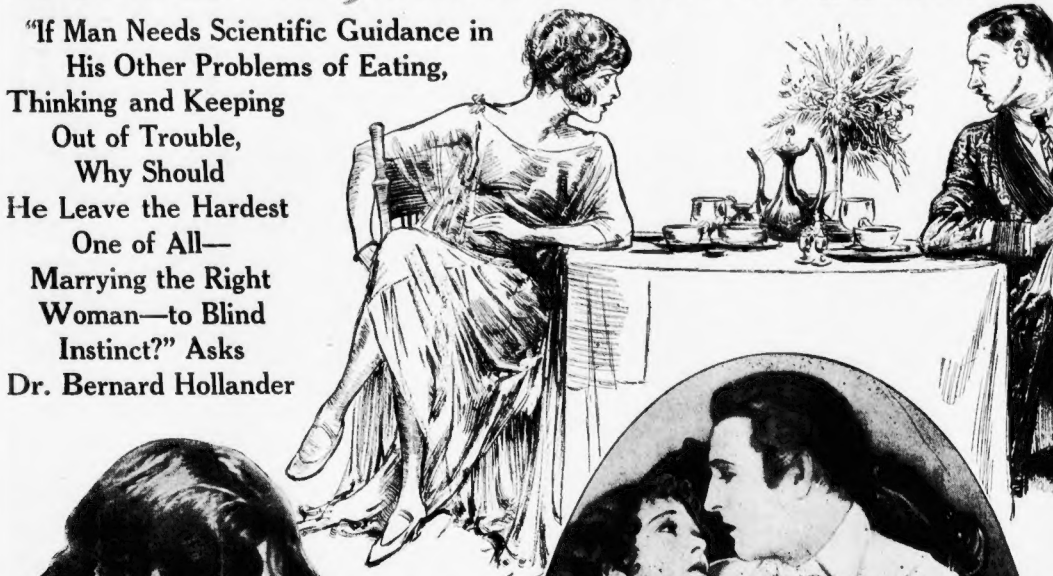
Frau Barth, Impressively Made Up as a Princess, Wearing Many Jewels, and Attired in a Manner That Gave Her the Appearance of Being the Proper Age for the Imposture.



Frau Barth, Who Posed as German Royalty and Was Sentenced to Two Years in Jail.

A Scientist Explains How to Pick a Satisfactory Wife

"If Man Needs Scientific Guidance in His Other Problems of Eating, Thinking and Keeping Out of Trouble, Why Should He Leave the Hardest One of All—Marrying the Right Woman—to Blind Instinct?" Asks Dr. Bernard Hollander



Millient Rogers, Wealthy American Heiress, Who Married an Almost Penniless Austrian Count and Soon Left Him, but Now Seems to Be Getting Along Better With Her Second Husband, Who Is Reported to Be a Rich South American. According to Dr. Hollander's Theories, the First Marriage Was Destined to Fail, and the Second One to Succeed—Unless the Element of Racial Contrast Upsets His Conclusions.

IN a recent address before the Ethnological Society of London, Dr. Bernard Hollander, of the Royal College of Surgeons, distinguished English specialist in nervous and mental diseases, pointed out a curious fact. While man eagerly calls in Science to help him decide all sorts of problems, from building a bridge to taking spots out of clothes, he leaves what is perhaps the most difficult and important decision of all—choosing the right wife—to blind instinct. No wonder he guesses wrong so often.

Dr. Hollander states that choosing a young man just what sort of young woman he may hope to get along with all his life is quite as proper a task for the scientist as telling a man what he ought to eat. But even when Science has revealed the ideal mates to each individual, they won't remain ideal very long after marriage unless both parties bear in mind certain psychological rules which Dr. Hollander states must be obeyed if people wish to be happy through married life.

"The woman should remember to make her home beautiful not only for visitors, but also for her husband."

"She should not hold her husband responsible that some of her friends are better off than her self."

"She should remember that her lover who sees her only for an hour, can easily make it his business to be agreeable, whereas the husband has to see her all day and in all moods."

"She should remember that the ideal lover is often a lover by profession, who would not make a man, and certainly not a more faithful husband."

"She should remember, if her husband has proved unfaithful, that it can happen with a woman whom he neither loves nor even likes."

"The husband should remember to put home life first and give his wife all he can of his spare time."

"He should remember that things go wrong at times even in the best-regulated home. He should show his affection for her often and not blame her for everything that goes wrong in the home."

"He should tell his wife her faults in friendly words and never in front of others."

"He should take her part when strangers are present, even though he knows she is wrong."

"He must not be a tyrant, but allow his wife as much freedom of thought and action as possible, so long as the welfare of the home and family are not jeopardized."

"He should remember that expecting a woman always to remain young and wishing to keep her merely as a source of pleasure, is as absurd as to expect a fruit tree to remain covered with blossoms all the year round."

"He should not forget that if he finds it an agony to see the same woman at breakfast for six days in the year, his wife does not find the same man a Proteus of joy and romance, either, and the chances are that she is just as much bored by him as he is by her."

"Finally, both partners must study each other, respect each other, and, if it comes to that, divorce."

"Hollander does not think hearts and poets are competent advisers. The young and even the old have been listening to them and the result is divorce. Marriage is supposed to be a structure, solid enough to last a lifetime; not something of plaster and tin, as the world's fair, to be torn down in a few months."

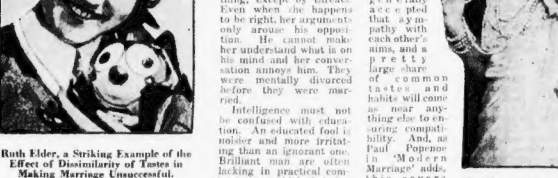
"Most women, while young," says Dr. Hollander, "can hold their husbands by the magnetism of mere physical beauty, but this is a chain that is more than likely some day to break. Physical passion is indeed the most powerful of magnets, but it is not the most permanent. The true cable of steel between heart and heart is to be found in that profounder sentiment called friendship."

"Nor will anyone deny that both good health and wealth may contribute considerably to making married life happy for a couple, and yet neither the most perfect form of both combined, nor the greatest wealth will ensure conjugal felicity. Absence of serious anxieties, with mutual esteem and common interests, is the foundation of all enduring happiness."

The psychological department of Northwestern University has worked



John Barrymore in a Scene With His Latest Bride, Dolores Costello—And That They Both Have the Same Interests Should Make Their Marriage Successful. According to Dr. Hollander, but Mr. Barrymore Had Two Previous Unsuccessful Tries at Matrimony.



Ruth Elder, a Striking Example of the Effect of Dissimilarity of Temperament in Making Marriage Unsuccessful.

out tests by which anyone can determine what kinds of work he can do successfully, and in what jobs he will fail. Science can and should do the same for matrimonial jobs, thinks Dr. Hollander, who indicates some of the most glaring mistakes that men and women make in the mating line.

"Probably no man," he says, "with a modest income would marry a woman who knows nothing of economy or domesticity, if he had the slightest suspicion that she would continue to think only of dress and amusement. He has the queer idea that he can marry the dowdy girl and turn her into a working woman the minute after the wedding ceremony is over. When he finds out the mistake it is generally too late, and the woman who ought to have married him and would have made the kind of wife he needed has lost her chance."

"The immature man, even if he were willing and able to use the utmost foresight and prudence, needs scientific guidance because he does not possess sufficient self-knowledge to know his proper mate when he meets her. Furthermore, he is not in a position to fully carry out his duties towards his family, and to be an efficient support to his wife in difficult situations, such as sickness and misfortune, but calamities, etc."

Dr. Hollander thinks that of all faults in a wife, stupidity is the worst. Many stupid husbands make a fair living, some amaze the world by getting rich, and their intelligent wives have the advantage of being able to manage them easily. But a stupid wife cannot

make her husband do anything, except by threats. Even when she happens to be right, her arguments only arouse his opposition. He cannot make her understand what is on his mind and her conversation annoys him. They were mentally divorced before they were married.

Intelligence must not be confused with education. An educated fool is noisier and more irritating than an ignorant one. Brilliant men are often lacking in practical common sense which their intelligent, though perhaps uneducated wives, often supply, making a happy and successful union. By accident the two have stumbled into a scientifically correct mating, each supplying what the other lacks.

"Many cruel husbands," says Dr. Hollander, "are the cause of the nervous breakdown of the woman, and it is not the drink that causes the cruelty, as the poor wife supposes, but frequently both drink and cruelty are symptoms of an hereditary taint. On the other hand, a woman, herself on the borderline, can by her temper and conduct drive a man, who has domestic traits added to his other traits and worries, to insanity. Many a desperate deed, chronicled in the newspapers, is the mere outcome of a mind driven temporarily insane by another tainted one."

"If one partner is healthy, especially the woman, the chances of the children becoming affected are small. The worst is that the tainted partner does not always become insane, but remains on the borderline, manifesting merely a lack of self-control, giving vent to his or her feelings on very slight or without any provocation. Such people are terrors to the household, and, curiously, it is not they who go mad, but not infrequently the man or woman who is tied to them for life."

"Professor Carl Pearson's statement that a man who marries a girl who is his social inferior forgets the inescapable fact that he is marrying not only the girl, but her family, and that it will probably be difficult to get her wholly away from her old environment. Of course, the girl's own personal worth is what counts; but this is largely derived from her family. If a man is not proud to have all his friends meet the girl he loves, she is certainly not the right one for him, and there is sure to be trouble later on."

The actor, John Barrymore, seems to be a type of what Dr. Hollander calls the "borderline" which calls for a close relationship in interests to insure marital happiness. His first wife was Katherine Harris, niece of Mrs. Herbert Harriman, a girl young, beautiful, of excellent family and wealth. But the art of the theatre, which meant so much to him, was for her only a pleasant diversion.

Mr. Barrymore's second wife, the former Mrs. Leonard Thomas, more nearly approached his ideal. She was herself a playwright of sorts, writing under the name of Michael Strawn. But the drama meant more to her than to actors.

The third time Mr. Barrymore finally found a woman he could love, who, at the same time, was one with him in her interest in the acting profession. His young wife, daughter of Maurice Costello, the motion picture star of a

past generation, is his mate on both sides of the footlights. According to the theories of Dr. Hollander they have an excellent chance for happiness.

Another example of like seeking like is Millient Rogers, daughter of Colonel H. H. Rogers, Standard Oil millionaire. Her first husband, Count Ludwig Salm Von Hoeseltraute, while a nobleman, an excellent tennis player and a cultured man, was not wealthy. Wealth was the one thing Mrs. Rogers was most accustomed to. Her present husband, Arturo Ramos, is a wealthy man, a young millionaire of the Argentine. They will probably get along.

A rich man marrying a poor girl may find happiness. It happens a great many times. An excellent example is the case of Miss Ethel Archer, a telephone operator at the Waldorf Astoria, who was wooed and won by William E. Hedgcock, vice-president of the American Car & Foundry Company, and a millionaire among men.

While, as has been said above, certain temperaments require a vocational kinship, others find such a connection fatal. It was a vocational kinship of a sort that underlay the marital life of Gertrude Lawrence and Laurence Olivier. Both were of the theatre, both were greatly admired by the other sex, both were much in demand for interviews and pictures to be printed in the newspapers and magazines. It was a fatal kinship of a sort that underlay the marital life of Gertrude Lawrence and Laurence Olivier. Both were of the theatre, both were greatly admired by the other sex, both were much in demand for interviews and pictures to be printed in the newspapers and magazines. It was a fatal kinship of a sort that underlay the marital life of Gertrude Lawrence and Laurence Olivier.

Cruelest Binding of Chinese Girls at Last Forbidden

The Nationalist Government Moves to Stop the Senseless Old Custom That Cripples Almost One-Tenth of China's 400,000,000 People



One of the Many Anti-Foot-Binding Cartoons That Have Been Painted in China, Showing the Sad Fate of Women With Bound Feet in Times of Disaster, Such as Fire and Flood

THE cruel custom of binding Chinese women's feet in childhood so that they are dwarfed for life will, it appears, at last be abolished.

Many attempts have been made in the course of more than a thousand years to bring about this reform, but it is announced that the Chinese are now really changing the custom.

General Feng Yu Hsiang, noted as one of the most successful of commanders in the Nationalist and democratic invasion of Northern China, who controls the provinces of Honan, Shensi and Kansu, has forbidden the practice. His administration is popular, and there are signs that his orders will be obeyed. In fact, this women have made a good start on the road to reform.

The General enforced his arguments in a lecture before a large audience of girl students in Honan by showing them a big photograph of German girl students taking part in a hurdle race at a great athletic meet in Berlin. The girls were splendidly developed, large limbed and large footed.

"I want you to look at this picture and think for yourselves," he said. "We are demanding equality with the rest of the world. We are opposed to imperialism and seek the abolition of unfair treaties with European powers. But I tell you we can never be equal unless our girls and women are as strong and healthy as those of other countries."

"Do you want to be strong and healthy like these women? Do you want to be able to move about swiftly and freely on your feet like them? Then you must quit the practice of foot binding is stamped out in China."

The girls all agreed that they wanted to be strong and healthy and to have perfect, unformed feet, and they promised to do everything in their power to see that the General's orders against foot-binding were enforced.

Foot-binding has already been nearly abolished in many cities of Southern China, where the influence of American and European education is strong. Canton is a center of emancipated and natural-footed women. The cruel practice, however, finds a tremendous stronghold among large conservative classes of the country, where parents find tiny feet add to the marriage value of their daughters. The reformers will take away this value by teaching Chinese that small feet are unattractive and worthless.

Fashion is also a tremendous influence in keeping up the custom. The desired reform can therefore be accomplished by changing the fashion, but fashions are followed in China because they are old.

The intelligent General Feng remarked that there were 400,000,000 people in China, but 10 per cent of them or 40,000,000 constituting a large proportion of the educated women, were useless because their feet were crippled.

The thought presented by General Feng is a startling one. If all the women of China became big footed, able-bodied and intelligent, it would mean the greatest revolution ever known in human affairs.

The subject of foot-binding is of great interest to philosophers and students of human nature. The torture suffered by the women who undergo it is almost beyond the power of words to describe. To have bones and nerves crushed day after day is a torture greater than was ever inflicted on criminals by the most vindictive laws of the past.

The methods of binding in vogue in China and the period of commencing the practice vary. The bandages are applied at from five to eight years of age. The general process consists of two stages. A piece of strong cotton cloth about two yards long and three

inches wide is first bound around the foot, leaving the great toe free and doubling the others under the sole so that the toes of the right foot push out under the left or inner side of the foot, and the same method is reversed for the left. This reduces the width.

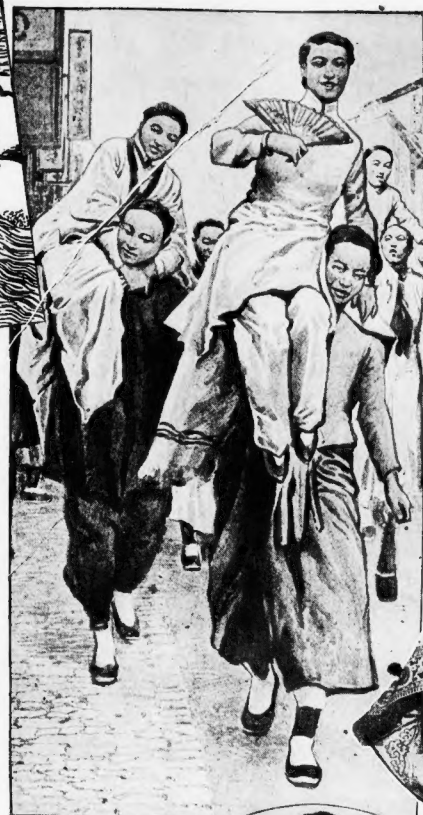
Each succeeding day the bandage is tightened both morning and night. Sometimes the long bones of the foot are refractory and spring back into place when the bandage is removed. There is a common remedy for this to strike them with the heavy wooden mallet used in washing clothes. For many months after the binding is commenced the little girl is compelled to run up and down on her aching feet to prevent mortification of the flesh and to get the feet in.

The process of binding continues for one year. The next step is the shortening of the foot. The bandages are then so arranged as to draw the fleshy part of the foot and heel close together. When this deformation is completed, a deep groove results between the fleshy part of the foot and the heel. The foot then resembles the clenched hand with the ball of the thumb pressing against the fingers. The process is not considered complete until a Chinese half-dollar can be hidden in this deep groove of the foot. The first two years of the process are the worst.

The suffering girl watches with stolid interest the applying of the bandages that make her a cripple—and a beautiful girl. She sometimes suggests pulling the tape a little tighter when it is found that the feet are still too large for her to wear a pair of handsomely embroidered silk sandals that not an American six-year-old in a hundred could force upon her foot. The binding expert assures her that when mortification upon the living body will have withered enough for her to wear the tiny shoes.

The trade of foot-binding offers a remunerative occupation to many women. It is easy to understand that to bind a foot and cut off just enough blood to wither the muscles and to keep the foot in a state of atrophy is quite an art, for if the feet are starved too much they will die completely, and as a result, mortification upon the living body will have withered enough for her to wear the tiny shoes.

The children who thus cripple their parents must be well-to-do and able to support them in idleness until marriage, for the little-foot woman is a wage earner is very nearly worthless. It is for this reason more than any other that a little-foot woman is always the darling of wealthy parents; and that in the matrimonial market she



Singing Girls, Who Are Unable to Walk Because of Their Bound Feet, Being Carried From Cafe to Cafe by Their Attendants

Below Them Is One of the Modern Girls of New China, Vigorous, Jumping a Bar and Unhampered by Distorted Feet.



Below Them Is One of the Modern Girls of New China, Vigorous, Jumping a Bar and Unhampered by Distorted Feet.

bring the highest price as a wife, for the weeks, months and years she spends in enforced idleness are devoted to the study of the arts, music, painting and even sculpture, until she reaches the marriageable age, which is about fifteen years. Then the "little-foot" is ready to provide over a mandarin's household, so far as education and accomplishments go. The Chinese, by the way, give the deformed foot the poetic name "lily foot."

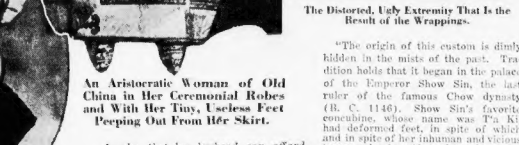
The bandages are kept on the feet until the woman attains her full growth and nature no longer attempts to struggle against the stout webs of silk and linen. Then they are taken off, and the Chinese girl hobbles through life on two withered stumps. A rich Chinese generally marries one or two natural-foot wives, and a little-foot wife, who at once becomes the head of his establishment. If times get hard and money scarce he may dispose of one of his natural-foot wives, but he must keep one of them to wait upon Mrs. Little Foot, help her move about the house, escort, or more properly speaking, half carry her and down the stairs, and do the housework for her lord and husband.



An X-Ray of the Distorted Bones That Are Produced in a Chinese Woman's Feet by the Cruel Old Practice of Foot-Binding in Infancy and That Make Her a Lifetime Cripple.



The Wrappings Around a Child's Foot Which Produce the "Lily Foot," as the Chinese Call It, a Mutation to Be No Longer Practiced.



The Distorted, Ugly Extremity That Is the Result of the Wrappings.

An Aristocratic Woman of Old China in Her Ceremonial Robes and With Her Tiny, Useless Feet Peeping Out From Her Skirt.

jewelry that her husband can afford are reserved for her. The natural-foot wife is a drudge, who must wear cotton instead of silk, use lard instead of oil on her hair, and wear brass in place of gold jewelry. But what luxury can repay one for a crippled body?

There are many curious stories of the origin of the foot-binding custom, but, inasmuch as they are many and different, they create a strong presumption that not one of them is true and that they were invented to account for the custom. After considering all these stories and every discoverable reference to the subject, Professor Macgregor, of the University of Edinburgh, came to the conclusion that foot-binding was the most remarkable instance of the mysterious influence of fashion known.

Some of the legends that account for the practice are interesting but not convincing. One has it that a certain Emperor found his Empress in the room of a courtesier. She explained that her feet had carried her there against her will. The Emperor accepted the excuse, but ordered the fore part of her feet cut off so that they might be less unbecomingly in future.

The Rev. J. P. Macgowan, in his "Sidelights of China," says:

"The origin of this custom is dimly hidden in the mists of the past. Tradition holds that it began in the palace of the Emperor Shou Sin, the last ruler of the famous Chow dynasty (B. C. 1146). Shou Sin's favorite concubine, whose name was Tu Ki, had deformed feet, in spite of which and in spite of her inhuman and vicious temper she is said to have been the most beautiful woman who ever lived. She was the cause of the fall of the dynasty, and to account for her fatal influence it is declared that she was a fox fairy who had assumed the form of a woman in order to be able to destroy the ruin of China. In the transition, everything was changed but her feet, and in order to disguise these she had to resort to the most ingenious methods. To curry favor with her the ladies in waiting bound theirs to be an exact imitation of those of the royal favorite. From that time, it is said, the custom began to spread from the court into the capital and from there throughout the empire. This legend is part of the national faith, and is transmitted from age to age as though it were history."

Another legend relates that the Emperor Li Hsien, of the Southern Tang dynasty in 299 A. D. had a beautiful dancer. Thinking to add to her attractions, he told her to bind her feet with red silk thread. She bound them tighter and tighter every day until he never reached a diminutive size never before seen. The court ladies copied the fashion, and thus it was established.

The Manchou emperors ordered the Chinese men to wear pigtail and the women to bind their feet. The man obeyed, but the women disobeyed. Very wealthy, do not bind the feet of their girls. Hence the remarkable case of bandits and pirates in China. Certainly China will be a different land when her women all have natural feet.

Pharaoh Tutmosis's Cruel Joke His Royal Mother-in-Law

But After 3,400 Years, the Spades of the Archeologists Dig Up the Whole Story of His Reprehensible Conduct Toward Masterful Old Queen Hatsepshut—and Turn the Joke On Him

A Portrait Head of Masterful Old Queen Hatsepshut Which Was Knocked Off Her Statue by Her Vindictive Son-in-Law, but for Some Reason or Other Was Not Itself Mutilated—Courtesy of the Metropolitan Museum of Art.

REPRESENTATIVES of New York's Metropolitan Museum of Art have dug up, in Egypt, what may have been the origin of the tradition that a mother-in-law is a "holy terror."

The most important country in the world 3,400 years ago was Egypt, and the most important personage on earth should have been Egypt's Pharaoh, Tutmosis III. But he was far from it, because his mother-in-law, Queen Hatsepshut, would not let him rule or be anything but a poor, insignificant shadow, banished from the "white lights" of Memphis to the Buto swamps.

For at least twenty-two years, and probably longer, she sat on his throne, wore the royal uraeus which should have been his, led all the royal processions, spent the kingdom's wealth and housed the entire empire. This was bad enough, but from an Egyptian's point of view there was something far worse. He was not getting any statues or obelisks put up in his name.

No nation seems to have worried so much about the hereafter as did those ancient dwellers of the Nile. The Pharaohs were supposed to be divine and to be worshipped by their subjects. While they were alive the Pharaohs could see to it that this worship was not neglected, but how much they could receive after death depended mostly on the size of the reputation they left behind.

Therefore, the moment an Egyptian ruler ascended the throne he began ordering statues of himself set up all over the empire and bearing inscriptions in a sort of Barroo & Bailey style, relating his glorious victories, in which he, personally, claimed to have slain countless numbers of the enemy. Of course, his own subjects must have read those vainglorious blurbs with a smile, but future generations were expected to take them at their face value. Year after year, poor Tutmosis saw no stone advertisements of himself going up while his mother-in-law planted the realm with glowing tributes to herself. Some of her obelisks were over 100 feet tall, and to be sure that the priests would be good to her memory, she built a great temple to the god Amen, at Deir-el-Bahari, filling it with stone effigies of herself, kneeling, standing, and even in the form of sphinxes. They were of all sizes, from life to twenty-four-foot monsters.

But the royal mother-in-law was a woman of vision, and foresaw a possible flaw in her plan of being worshipped forever as the biggest of all the rulers. It was hard enough to make people believe that a male king could slay so many soldiers in battle and spear a dozen lions at every hunt. To pretend that a woman did such things might not be swallowed at all. To silence future scoffers she had many of her statues made with a long, Pharaonic beard.

In those days the Egyptian custom of "causing the parties" was wearing the beard. So that there would be no doubt about who wore the beard in the royal family, she not only wore it on her statues, but put a false one on every triumphal procession. Moreover, being truly feminine, she also left plenty of presumably flattering references of herself without any disfiguring whiskers. How she expected posterity to straighten out that inconsistency is not known, but Son-in-Law Tutmosis never gave posterity a chance. When, then, the first great feminist and ancestor of women's rights (as far as they applied strictly to herself) had not so others, such as her own daughter, Nefertiti, was the daughter of Tutmosis I, born to him by one of his wives, Ahmose, and because her brothers had died her father placed Hatsepshut on the throne, at his side,

for she had already manifested tremendous mentality. It was quite usual among the Egyptian Pharaohs for sisters and brothers to marry in order to preserve the divine blood, and so she was wedded to her half-brother, Tutmosis II, who ruled but two or three years with her, when, in some mysterious way, he died, and the ambitious woman became the ruler.

That was only a supposition, because when Tutmosis became of age he found himself out in Buto, and knew better than to make any move against that triple threat of mother-in-law, step-mother and aunt, who sat on his throne.

The Queen, shrewd in other things, seems to have misjudged the character of the young man. He treated her as rough. There would have been criticism if she had openly murdered the rightful Pharaoh, but there were no coroners in those days, and who would have known whether someone put poison in the royal nuptial's wine or if he just died of acute indigestion?

The fact that she let him live proves that Hatsepshut never dreamed of the cruel revenge he was plotting as he hid his time, and poor Tutmosis came into his own at last.

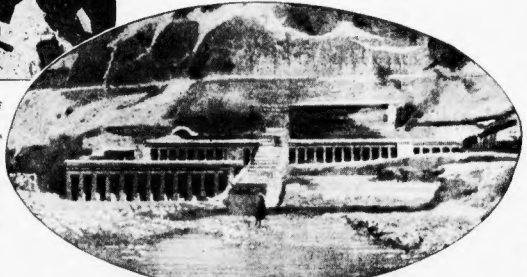
As soon as the new Pharaoh was firmly on the throne, he sent men up and down his long, thin empire, with orders that they must have caused the mummy of Queen Hatsepshut to turn in its sarcophagus. Every one of her statues, bearded or otherwise, was pitched from its pedestal and smashed. But Pharaoh Tutmosis had not been a hasty, careless man; he got around this, as he thought, by ordering the hated name of his mother-in-law erased from all inscriptions of the king and his own substituted. This, he imagined, would free posterity, which would give him credit for



A Standing Statue of Queen Hatsepshut All Broken Up Under the Hammer of the Vengeful Tutmosis, but in Much Better Condition Than It Would Have Been If He Hadn't Also Thrown It Down a Quarry—Courtesy of the Metropolitan Museum of Art.



A Wall Painting in the Queen's Temple at Deir-el-Bahari, With the Queen's Portrait Scratched Off by Her Son-in-Law's Orders and Her Own Name Obliterated Wherever It Appeared in the Inscriptions.



The Ruins of Old Hatsepshut's Temple at Deir-el-Bahari, Which Her Son-in-Law Didn't Dare Destroy, but Threw Out of It All Her Statues.

all her building and most of her boasting. Instead, the vandalism of Tutmosis has now made his mother-in-law far more famous than if he had let her statues and carvings remain to be erased by the elements or destroyed by invaders.

But Pharaoh Tutmosis must have been a hasty, careless man; he got around this, as he thought, by ordering the hated name of his mother-in-law erased from all inscriptions of the king and his own substituted. This, he imagined, would free posterity, which would give him credit for

unintentionally preserved his mother-in-law's hated features from the weather, face-paint and all. The shade of Queen Hatsepshut must have laughed at the shade of her son-in-law as they looked down from the realm of Osiris and saw the scientific joy of the Metropolitan Museum's excavators when they brought to light splendidly preserved heads and bodies depicting this ancient feminist.

Navigle, an earlier excavator, unwittingly multiplied the task for them many fold. In 1892, when he ex-



Another Portrait Head of Queen Hatsepshut With Its Eyes Gouged Out and Its Nose Broken in This She Is Shown Wearing the Pharaonic Beard as a Sign of Her Supreme Authority—Courtesy of the Metropolitan Museum of Art.



A Curious Large Kneeling Statue of the Old Queen Picked Together From the Fragments Into Which Her Son-in-Law Broke It. Her Name Has Been Chiselled Off the Inscription at the Back.

careless about that, too. Sure enough, he had, but it was not till this last season that they found he had pitched them down into the very quarry from which Queen Hatsepshut had cut some of her tallest obelisks.

In this Tutmosis had shrewdly regained. The shade of the dead had blown down into the pit and received the fragments, with the result that they are now the best preserved statues of the eighteenth dynasty in existence today. Even the ancient coloring is fresh and bright.

Tutmosis had not only preserved his mother-in-law's hated features from the weather, face-paint and all. The shade of Queen Hatsepshut must have laughed at the shade of her son-in-law as they looked down from the realm of Osiris and saw the scientific joy of the Metropolitan Museum's excavators when they brought to light splendidly preserved heads and bodies depicting this ancient feminist.

excavated the Queen's temple of Deir-el-Bahari, he dumped 1-800,000 cubic feet of dirt into the pit and all this had to be pulled out again. But the result more than justified the pains and expense. Ten upon ten of broken statuary, carved from red granite, black granite and limestone, were carefully lifted up of the sand below Naville's dirt and placed in store-rooms to form the basis of one of the greatest collections of all times. The experts will probably play it that game for many years. As fact is, a statue stuck together it will be set in the original place from which 3,400 years ago it was ejected. Queen Hatsepshut will have her temple and her name, slightly disfigured, but much less so than if her son-in-law had not tried to rub her name from the page of history.

Besides telling the world that she is pure gold as well as the daughter of,

rather, son of a god, and wearing a beard and male attire to prove it, this modest monarch advertised herself as a great conqueror, explorer and trade pioneer. If her head is to be believed, she was the first to complete the conquest of Lower Egypt and therefore to be entitled to wear the crown of Egypt.

In the ninth year of her reign, Hatsepshut sent a great fleet from the port of Thebes to the distant land of Punt. The ships came back laden with sacks of gold, elephants' tusks, frankincense, leopard skins, baboons, and monkeys. It is not recorded that poor old Tutmosis, out in the swamps of Buto, got as much as a pet monkey out of all the plunder.

Tutmosis seems to have foreseen early that the Queen Regent, who was then only his step-mother and aunt, might give him an argument when the time came to turn over the throne to the young man. So he married her daughter, Nefertiti, thinking it would soften the heart of the terrible lady with false whiskers, and make her a mother-in-law. Whether Nefertiti had to play acquiescence with her vindictive husband in Buto, or merely allowed to play around the royal court at Thebes is not known.

Many years ago a red granite nose of heroic size was found in the sand near the temple of Deir-el-Bahari. That big, red nose now turns out to fit the royal countenance of a Pharaoh, a statue of the Queen from the pit.

Her Majesty shared the folly of many other earlier and later monarchs in decorating some of her statues with gold, thus making it certain that sooner or later, like the tombs of the Pharaohs, they would be plundered for the precious metal.

Roams Near It, the Super- stitious Say



LONDON, Jan. 1

A black and white photograph of a man and a woman standing in front of a stone building. The man is on the left, wearing a light-colored shirt and dark trousers. The woman is on the right, wearing a dark dress. They are standing in front of a stone wall with a window and a small arched opening above it. The building is surrounded by trees and foliage.

Rosamund had heard Rosemund in a convent. A convent girl, with this advantage of being a virgin, was a more desirable match for her marriage. It remains probable that the young man, however, was not deceived, although she may not have taken poison or dagger to her rival.

Rosamund was a beautiful girl, and her beauty was the cause of her ruin. She was the daughter of a nobleman, and her father was a powerful man. She was the daughter of a nobleman, and her father was a powerful man. She was the daughter of a nobleman, and her father was a powerful man.

On the stones were found cut references to the spring as Fara Rosamund's spring, and the name of the spring was the same as the name of the spring in the story. The name of the spring was the same as the name of the spring in the story. The name of the spring was the same as the name of the spring in the story.

in remembrance of Fair Rosalind.

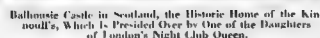
W. B. R.

Recently a man homeward
from the city, who had been
in the city for some time,
told me that he had seen
some of the old people
there that they have heard
sparking noises coming from
the well, as if some one were

There is an old tree known as "Old Manara," and a legend of a royal lover who was killed in the garden of the palace of the Ming Emperor, Xian-tzu, in A.D. 1400. The carved stones found there. The villagers of Woodstock, which lies outside the palace grounds, are greatly interested in the discovery of the two old visits of the Emperor and his consort, Fair Rosamund at the famous Abbey at Godstow. The stone found before the gate of the abbey is a sun dial of the 14th century.

It was here, according to the underlying legend, that the fierce Qu surprised poor Ro-amuud and her romance and her life.

**Disgusted at the Public Ovation by
Titled and Influential Persons
When the Notorious Mrs.
Meyrick Came Out of
Jail the Other Day, the
British Government
Now Goes After
Her in Earnest**



able to find little us husbands for her two girls & daughters. She has several more growing up and it remains to be seen whether our sentences will interfere with her match-making talent.

Scientists Agree That Interplanetary Flight Is Now Possible, as Proved by Experiments With Rocket-Automobiles, But an Astonishing Bunch of Unsolved Mysteries Await the Daring "Astronaut" Who First Tries to Navigate the Heavens



as suggested by Mr. Hugo Gernsback, Editor of "Science and Invention."



A Space Ship Bound for Mars.—An Artist's Imaginative but Unscientific Glimpse of the Near



There is no theoretical reason why it should not shoot almost straight up a hundred or two hundred throw energies at each other. The slightest change in the angle of efflux of the rocket gases would,

doi:10.1017/S0022292412001607 Printed in the United Kingdom

doi:10.1017/S0022292412001607 Printed in the United Kingdom

through the finest possible
for being so stingy with the

It has been sighted by a destroyer. It submerges of the rocket plane cruising around the Earth.

Continued on Page 22

13

Even fried chicken can be more delicious

BAKE AND FRY WITH A FINE SALAD OIL.
THAT'S THE NEW WAY—THE MODERN
WAY. IT'S EASY AND CONVENIENT.
AND IT MAKES FOOD TASTE BETTER...

There are lots of people who thought fried chicken *couldn't* be any more delicious—until the younger generation of modern housewives came along with this idea of baking and frying with a choice salad oil.

The "Wesson Oil way," they're beginning to call it. For one simple reason that for them Wesson Oil has always been a salad oil; a fine, pure, delicately flavored oil—light in color, crystal-clear—that they keep on their tables and use for their most piquant French Dressings and Mayonnaise.

And young housewives everywhere are demonstrating the Wesson Oil way means fried things that are rich and wholesome as never before. And cake, biscuit, muffins, waffles, pie crust so light and delicate that one feels decidedly that the new way has proved itself beyond question.

QUICK FRYING IS PERFECT FRYING

Like fried chicken... Of course Wesson Oil is so good to itself that it can't help making food taste better.

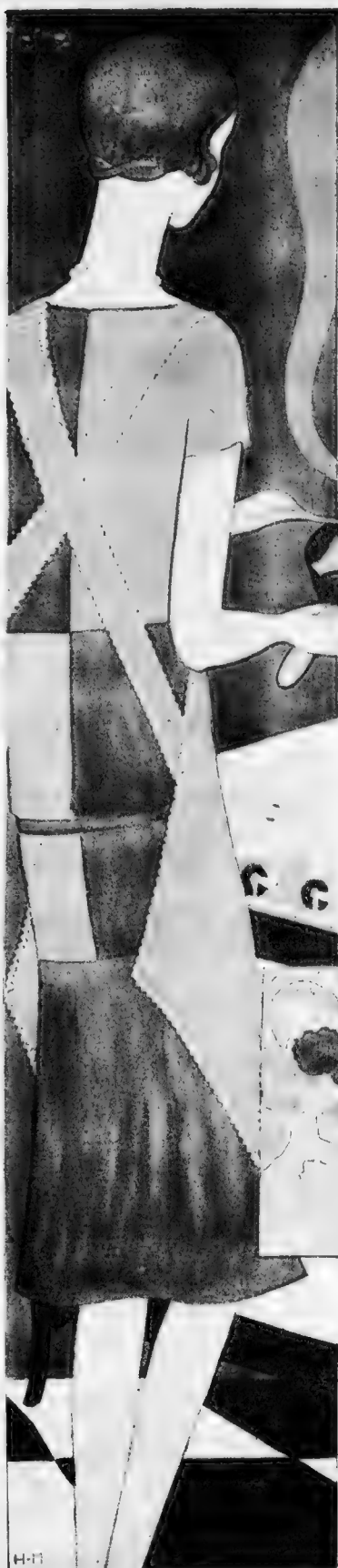
Not more than that. With Wesson Oil you can *pour* it in a pan or kettle instead of waiting for the fat to melt—the old-fashioned way. That certainly is a *convenience*, isn't it?

And even more than *that*, Wesson Oil is ready to fry in a pan or kettle—long before it begins to burn or smoke.

The frying is done so quickly that it sears the chicken *once*—keeps *out* any possible excess oil and keeps *in* all the flavor of the chicken itself. Chicken fried in Wesson Oil is that rich, delectable, fried taste and yet is always as wholesome and digestible as if you had put it in an oven and broiled it.

USE ALL YOUR BAKING ALSO—THIS FINE SALAD OIL is like Wesson Oil for baking, too. It's easy and convenient to use. For you just *pour* it to measure and *pour* it to mix. And it helps you measure quickly and accurately too. And Wesson Oil is so pure and delicate in flavor that whatever you bake with it is sure to be light and delicate and fine-textured.

Sooner or later you'll adopt this new, modern way of cooking with a fine salad oil. Indeed, within a few years probably the majority of housewives will be baking and frying



this way, just as a matter of course? We imagine you'll like to keep a little ahead of the procession.

Elsewhere on this page we print some suggestions for frying chicken with Wesson Oil which may be of interest to you. A perhaps, too, you'll be interested in sending for our new Wesson Oil recipe book. If you'll fill out the coupon below and mail it to us, you will receive a copy by return mail.

NOTE • Baking with Wesson Oil doesn't require new recipes. All your old favorites can remain in service. Simply use Wesson Oil wherever the recipe calls for shortening... Add a pinch of salt, for there is no salt in Wesson Oil.

FRIED CHICKEN

1 cup Wesson Oil • 1 cup milk or cream
1 t. black pepper salt • ½ cup water • 2 cups flour • 1 chicken

A very young chicken should be cut in pieces of 4 or 5. Or a full grown but young chicken may be used, if desired, and cut in small pieces and disjunct as for frying. Roll each piece in the flour and cut oil which has been sifted together. Heat the Wesson Oil in a heavy frying pan or kettle. Add about ½ chicken to cover the bottom of the pan. The chicken should be turned only once, the frying being

completed in about twenty minutes. When brown, drain off all but one-fourth cup fat and add the water. Simmer very slowly until tender. A very young broiler will take half an hour and a full sized chicken from one to two hours. Re-finish the water if necessary. Serve with a gravy made with the drippings in the frying pan, two tablespoons of the flour in which the chicken was cooked and 1 cup milk or cream.

WESSON OIL IN A NEW CAN—WITH A SPOUT!

Now Wesson Oil is more convenient to use. Easier to pour. No oil dripping down the sides of the can... Turn the spout out, punch holes where marked, and pour. Then turn it back out of the way. Simple isn't it?

FREE • A NEW WESSON OIL RECIPE BOOK

We'd like to send you a copy of our new recipe book for making good things to eat with Wesson Oil. It's full of the most delightful recipes—many of which will be quite new to you—all of them quite practical.



The Wesson Oil-Snowdrift People,
210 Barronne Street, New Orleans, La.
Please send me your new recipe book.

NAME _____ ADDRESS _____
My grocer is _____
NAME _____ ADDRESS _____

We sincerely believe that no woman to whose care has been entrusted the health and well-being of a CHILD . . . can pass over this page

SUNLIGHT—giver of Health . . . In those rays that come bathing down on us from the sun, scientists have discovered the secret for a vitamin which is essential to the building of sturdy bones, needed for strength and vigor for our children. They have named it Vitamin D—the sunlight vitamin . . .

This is no ordinary advertisement. In fact, it is one of the most extraordinary advertisements that you may ever have read.

It has to do with one of the most important single discoveries that has come out of scientific laboratories within the last decade. With the mysterious but vital bone-building, growth-regulating element that comes to us in sunlight.

Now it has been proved that a delicious natural food product contains the famous Vitamin D which has been featured so dramatically in the pages of medical and scientific journals and women's magazines.

The product is Cocomalt. Thousands of women with children know of Cocomalt as a delicious, healthful, balanced food—rich in proteins, carbohydrates and mineral salts—which adds 70% more nourishment to milk.

Now thousands and thousands more women will know of Cocomalt as the food which brings to their children this vital sunlight vitamin . . .

WHAT IS THIS SUNLIGHT VITAMIN? No one knows exactly. Scientists can only tell us what it does. Produced by the rays of the sun which are absorbed in our bodies, it combines in some mysterious way with the food we eat to make us strong and vigorous.

Specifically, Vitamin D helps put the needed lime into young bones, develop sound teeth, prevent rickets, (soft bones, bowed legs) and assure the steady, symmetrical growth of the whole bone structure.

It is this discovery of Vitamin D and of the vital part it plays in health that established the vogue for sunlight bathing which has swept

Europe and America—styled children's bathing suits so that every possible inch of their little bodies may be exposed to the rays of the sun—and led to the invention of varied kinds of sun lamps to create artificial sunlight.

Also, curiously enough, scientists have discovered that this same vitamin, contained in cod liver oil, is the real reason why that sturdy, old medicine has been so successful.

VITAMIN D CONTAINED IN COCOMALT But cod liver oil is a medicine. And this precious sunlight vitamin should, without question, be a part of the natural food in every child's diet.

For not all children can spend their summers at the beach. And, of course, there are the long winter months when the sun's rays are less intense and when children have to spend so much more time indoors.

So the makers of Cocomalt went to famous scientific authorities. After long and intensive experiments, these authorities definitely proved that Cocomalt contains Vitamin D—in the necessary quantities to build sturdy bones and sound teeth, strength and vigor for your children.

This sunlight Vitamin in no way affects the taste, flavor or goodness of Cocomalt. Yet Vitamin D is there.

A DELICIOUS DRINK THAT CHILDREN LOVE • Make no mistake. Cocomalt is not a medicine. It is a nourishing, easily digestible, natural food with a delicious chocolate taste. Mixed with milk it combines in scientific proportions nourishing elements ideally suited to children.

Children love it. And mothers everywhere have found that Cocomalt is an easy way to get children to take the milk they need.

Now, with Vitamin D—this sunlight vitamin that builds bones and sound teeth and strength and vigor—Cocomalt becomes more than ever an essential food that every child should have.

* * *

SERVE HOT OR COLD • Cocomalt is a delicious drink that may be served either hot or cold. As a hot drink it is a particularly happy suggestion for breakfast or after school, these cold wintry days when children need its nourishing warmth . . .

You may get Cocomalt from your grocer in various sized cans including the popular half-pound size at 25 cents (30¢ west of the Mississippi). If your grocer cannot supply you, take advantage of the sample offer.

R. B. DAVIS COMPANY • Hoboken, New Jersey
Makers of Davis Baking Powder

A GENEROUS SAMPLE AND BOOKLET • Send 10 cents (to cover the cost of mailing) and we will forward you a generous sample can of Cocomalt—together with a fascinating booklet entitled "Children of the Sun". This booklet was prepared for the R. B. Davis Company, by specialists in the field of medicine and nutrition, based on their own comprehensive research work on Cocomalt and Vitamin D, the sunlight vitamin.

R. B. Davis Company
Hoboken, New Jersey

Enclosed find 10 cents. Send me booklet and sample of Cocomalt mentioned above.

NAME _____

STREET (or RFD) _____

CITY _____

COUNTY _____

STATE _____



Adds 70% more nourishment to milk

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AND WANT RHEUMATISM EARLY
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IN A BOTTLE.

RHEUMATISM?

**Sloan's
Liniment
KILLS PAIN**

Mad Money By Virginia Swain

Synopsis from Preceding Chapters.

SYLVIA LARTON drawing to a stop a small Midwestern sedan which she wanted to be seen to drive to New York town from what Jack has told him that Sylvia has discovered his identity based about the death of his father and decided to

[illegible]

CHAPTER XXXIX

IT was sleeting and blowing outside, but in Julia's apartment the weather was dry. Two young women were sitting in for a party. It was Budd Morell party, and

way and away, half a brood and getting up and about in all the wood in the neighborhood. I was a New Year's bird, and every New Year since Buddy left college and and one like it.

His New Year parties usually began about two and ended when the last guest was broken and tired and glad on the floor, and with the New Year toast up and their drooping eyes, was already three or four hours old.

[illegible]

Tough, it's worth noting, had reached a climax in the matter of the bathtub. Sylvia had poured in some of her precious bath salts, and had turned on the water, and she was sitting there waiting for the bubbles to rise, when the door opened and a maid came in with a bucket of water. "You can't have a bath now," she said. "The water's out."

[illegible][illegible]

By Midnight, Buddy's Party Had Reached Its Height.

little snake and a very strong, sweet perfume. It was quite stifling, as one came in from the cold. Several of the guests had already volunteered to do so, and one to sleep on the sofa.

Buddy welcomed her with warmth, poured her a drink and

**Sylvia Sets Out to Marry Riches
but Finds Something
Entirely
Different**

led her to a group of people he "thought she would enjoy." His thoughts and plans were no longer than his and his.

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Lemons

help to prevent
"flu"

Take *fresh* Lemon Juice and ordinary baking soda—three times each day. Formula: Half teaspoon of baking soda in half glass of water. Pour in juice of one Lemon. Drink while effervescing.



Hot Lemonade

If the first symptom of a cold, go home as quickly as possible. Drink a large glass of piping hot Lemonade. Take a hot bath in a warm bathroom. Dye yourself thoroughly. Get into a warm bed at once. Then, drink a large glass of piping hot lemonade. Savor the very taste. Get into warm covers. You will soon be getting relief through a "sweat-out" which helps expel the poisons through the pores. When you awaken, next morning, drink Lemon Juice and soda (as described above) and continue 3 times daily or oftener until entirely free from cold symptoms. Remain in bed next day, help save yourself from a prolonged illness with possibly serious

Safeguard Yourself

Take these simple precautions: Avoid people with colds. Mouth and nose germs are cast 20 feet by promiscuous coughing and sneezing. Avoid shaking hands. Avoid exposure and drafts. Avoid heavy foods. Eat sparingly, with vegetables and fresh fruit juices pre-dominating in your diet. It is of utmost importance to balance the diet at such a time. Avoid crowded places. Avoid becoming over-tired or over-heated. Avoid constipation. Get sufficient sleep. Drink plenty of fresh Lemon and Orange juice daily. Every drop build resistance to colds and helps correct or prevent Acidosis, which is present in every common cold.

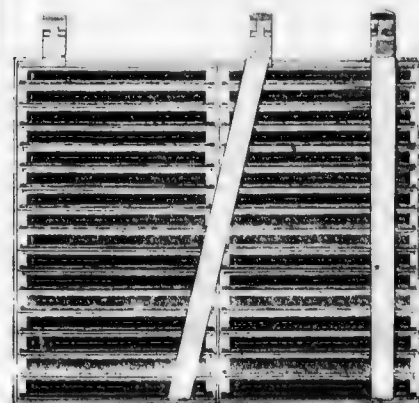
CALIFORNIA

Sunkist *health* Lemons



This is the big, original, Heavy Duty Eveready Layerbilt "B" Battery No. 136. The longest lasting, most convenient and economical of all Evereadys. List price, \$4.25.

Diagram illustrating the simplicity of Layerbilt construction. Note the absence of fine wires. Only two metal bands and only two soldered connections. No waste space. It's all battery. Layerbilt construction is a patented Eveready feature. Only Eveready makes Layerbilt Batteries.



HERE IS THE STORY OF COMMON SENSE IN AND OF REAL ECONOMY IN

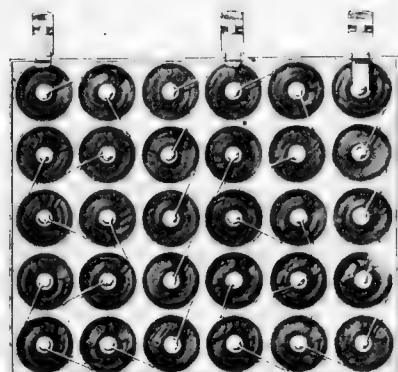


Diagram illustrating construction of a cylindrical cell "B" battery. The solderings per cell, or 60 in all, and 29 fine wires—89 chances for trouble. Note waste space between cells.

TUESDAY NIGHT IS EVEREADY HOUR NIGHT

East of the Rockies, 9 P. M., Eastern Standard Time
Through WEAF and associated N. B. C. stations
On the Pacific Coast, 8 P. M., Pacific Standard
Time Through N. B. C. Pacific Coast network

THE thing that makes an Eveready Layerbilt "B" Battery last so long is its unique, exclusive, patented construction. It is built of flat cells, which occupy all available space inside the battery box and so pack more materials in a given space.

We could make a "B" battery out of cells of any shape whatever. In fact, in our 36 years of dry battery manufacturing we have experimented with every possible shape. Our laboratory proved conclusively that for "B" batteries the flat cell is best.

In the Eveready Layerbilt the flat cells pack together tightly and make connection with each other automatically, by the full contact of the flat sides of each cell against its neighbors. This eliminates not only waste space between the cells, but many soldered connections. In a 15-volt "B" battery assembled of individual, sealed cells, cylindrical or any other shape, a fine wire has to be soldered to the carbon electrode, and another to the zinc, to connect cell with cell. Thus there are two solderings per cell, or 60 in all, and 29 fine wires—89 chances for trouble! In the Eveready Layerbilt there are only five solderings. There are no fine wires, but only two strong metal bands, each 3/4-inch wide.

Five solderings and two broad bands, against 60 solderings and 29 fine wires—the simplicity of the Layerbilt is evident!

This is certainly the common sense way to build a "B" battery—a layer of zinc, a layer of chemicals, a layer of carbon, and so on, layer on layer. Apply pressure, and you have a single, one-piece unit, automatically self-connected, trouble-free, because built right, and longer lasting because it contains more materials.

Now you might think that such a fine battery as the Eveready Layerbilt must be expensive, but it is nothing of the sort.

The Big, Heavy Duty Eveready Layerbilt No. 136, the longest lasting Eveready "B" Battery we make, costs \$4.25. That is only 25 cents more than the cylindrical cell Eveready of the same size. For your extra quarter of a dollar you get about 30% longer service.

The Medium Size Eveready Layerbilt No. 135 costs \$2.95. That's only 20 cents more than the cylindrical cell Eveready No. 772 of the same outside size. You get about 25% longer life.

For real economy, convenience and satisfaction, buy Eveready Layerbilts. Layerbilt construction is a patented Eveready feature. Only Eveready makes Layerbilt Batteries.

NATIONAL CARBON CO., INC. New York—San Francisco
Unit of Union Carbide and Carbon Corporation

OLD MONEY WANTED

We Paid \$200
to D. Martin, Virginia
FOR JUST ONE
COPPER CENT

There are people who are not satisfied with the old money they have and want to get rid of it. They want to get rid of it because they want to get rid of it. They want to get rid of it because they want to get rid of it.

This is but one of many similar letters we are receiving. For instance, we have received from Mr. Manning, New York, \$2,500 for a single silver dollar. Mrs. C. E. Adams, Ohio, received \$740 for some old coins. We paid W. F. Williams, Pennsylvania, \$1,500 for some coins. In the last twenty years we have paid hundreds of others hundreds of others hundreds of others.

All Kinds of Old Coins Wanted, \$100 to \$1,000
We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper.

Big Cash Premiums for Hundreds of Old Coins
We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper.

We Will Pay You to be Possessed on the Big Values of Old Coins
We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper.

You will get your own when you send your large illustrated coin folder
We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper.

SEND COUPON NOW
We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper. We are looking for all kinds of old coins, including gold, silver, and copper.

Numismatic Company of Texas,
Dept. 275, Fort Worth, Texas.

Please send me your large illustrated coin folder for which I enclose 1 cent.

Name
Address
City State

Deformities of the Back
Thousands of Backache Sufferers
"Anybody can prepare a mixture at home that will relieve backache and make it easy." To a halfpint of water add 1 ounce of Epsom salt, a small box of Barbo Compound and 1 ounce of glycerine.

AN OBLIGING BEAUTY DOCTOR
A Beauty Specialist Gives Home-Made Recipe to Darken Gray Hair.

Mrs. M. C. Gillespie, a well-known beauty specialist of Kansas City, recently gave out the following statement regarding gray hair:

"Anybody can prepare a mixture at home that will relieve backache and make it easy." To a halfpint of water add 1 ounce of Epsom salt, a small box of Barbo Compound and 1 ounce of glycerine.

"These ingredients can be purchased at any drug store at very little cost. Apply to the hair twice a week until the desired shade is obtained. This will make the hair look as young as twenty years younger. It will not color the hair, but will rub off."

BARBO

When Every Boy's Cold and Hungry
By Mary Lee Swann,
The Well-Known Writer and Lecturer on Cooking.

Fish Stuffing.
Mix 1 cup stale bread crumbs, 1 cup cracker crumbs, 1 cup melted butter, 1 teaspoon salt, a few grains pepper, a few drops onion juice and 1 cup hot water.

Favorite Hard Sauce.
Wash and cream 1/2 cup butter. Gradually beat in 1/4 cup sifted brown sugar. When light gradually beat in 2 tablespoons cream, 1/2 teaspoon vanilla and 1/2 teaspoon lemon extract.

Rocket Aeroplanes to Explore the Stars

(Continued from Double Page)

themselves strangely out of control. If a man arose from his chair, the effort not only brought him to his feet, but sent him slowly and lastly right on up to the ceiling of the car. To stop the involuntary ascent, he had to make vigorous swimming motions and swim downward through the air until he reached the floor. A better way was to resign himself to a trip to the ceiling, then give a quick waltz, and he would be holed down to the floor again.

But on the floor, walking was impossible, because the downward pressure of the foot necessary to permit stepping, sent the man aloft again on another ascension. Whoever got good or bad may befall those first tourists of the solar system, science knows that they will have to face this nuisance.

The simplest way to get around it is to string ropes in all directions for the crew to pull themselves along after their feet become useless. Another scheme is to have the explosive cartridges arranged in a cylinder in the center of the rocket, which will revolve in one direction while the second moon and could go on in the opposite. When gravity fails, centrifugal motion would turn it in a cylinder in the center of the rocket, which will revolve in one direction while the second moon and could go on in the opposite.

This plan is not thought practical because the spinning may make the rockets and other bad effects, besides interfering with observations.

Mad Money By Virginia Swain

(Continued from Page 20)

"ton." She gave the address of her new apartment. "He can reach me by telephone at the old address. He's moved to a new place. The man answered in a cold voice.

In the dressing room Bella halted her. "Where you been, Sylvia? I just told you you weren't in. It's the same woman that's been raising the hell trying to make you a few dollars."

Sylvia wrinkled her brow. "I can't imagine who she is. What did you tell her?"

Bella powdered her nose reflectively. "I didn't tell her anything. I didn't like the tone of her voice. She asked where you lived, and when I wouldn't tell her that, she asked when you left the shop for the day. By that time, I was feeling pretty cross and I just snapped out. When she left, she said 'what did you think?'"

Sylvia sat down wearily at her dressing table and rested her head on her hand. Bella eyed her a moment, then shook her head and turned away.

As she was getting ready to leave the shop, Raymond's secretary came in. "Mr. Raymond would like to see you," she said, almost apologetically. "How much could she know of the matter among the staff?"

Sylvia shook the summons. Raymond raised an embarrassed red face to greet her. His small eyes looked sorrowfully out from the surrounding rosininess and his mouth moved dropped childishly at the corner.

In the midst of her unhappy preoccupation, Sylvia was moved. She went up to his desk and looked at him gravely. "This sorry," she said simply.

Raymond winced and raised one pink hand as if to forestall a blow. "On Sunday night you will leave for Montreal," he said, with an attempt at sternness. "I am sending a branch of the Hotel Tudor in two months. I wish you to talk with Enoch Morgan, who will be manager."

Salmon Loaf.
Mix 1 cup cream and 2 well-beaten eggs, 1/2 cup milk, 1/2 cup melted butter, and 1 cup of chopped salmon. Steam 2 1/2 hours. Serve hot with spiced hard sauce.

Steamed Date Pudding.
Mix 1/2 cup flour, 1/2 cup sugar, 1/2 cup butter, 1/2 cup milk, 1/2 cup molasses, and 1 cup of chopped dates. Steam 2 1/2 hours. Serve hot with spiced hard sauce.

Baked Fish.
DRESS fish and sprinkle with salt. Fill the cavity with stuffing and sew edges together with string. Bake in a greased baking dish for 30 minutes. Place in a hot oven and broil until brown. Serve with any desired sauce.

Prune Teas.
COOK 1/2 pound prunes in boiling water to cover until tender. Remove stones, add 1/2 cup sugar and the grated rind of 1/2 lemon and cook until thick. Cook thick round slices of bread in 2 tablespoons butter until delicately browned on both sides. Place prunes on each slice, run off sweetened whipped cream on prunes and eat immediately.

The most ingenious scheme is to line the walls, floor and ceiling with thin sheet steel and provide the crew with shoes having magnetic soles. Then, when gravity returns from the scene, the occupants of the car should be able to walk along the floor, up the wall with their boots, and on out at right angles, and then to walk along the ceiling, head down, exactly like flies.

Medical scientists have been asked whether an animal-like man, which, since the beginning of evolution, has been accustomed to gravity, can live without it. The consensus is that he can. A mouse and could go on traveling around and around the planet for all eternity, if it is not taken care of.

Nothing more will be done until the fourth or fifth swing into a position where, by turning on the rockets again, they can aim to reach the orbit of Mars just as the red planet gets there.

It would not be necessary to burn fuel all the way, just enough to get up the required speed and to head in the right direction. As they would be traveling in a vacuum with no resistance but the faint gravity drag from the sun and light side pulls from the various planets, they would go on and be lost in the outer darkness beyond the solar system for hundreds or thousands of years until finally they would be pulled back by the thin, elastic thread of the sun's attraction and return like comets.

This would not happen, of course, if they bumped into Mars, which would not be the idea, nor if they came close enough to become an extra satellite, which would be the idea. They could then circle the red planet and observe its features at close range for about two years.

Probably the first ship or two would not attempt to land even if their observations made the experiment seem safe. About two years later, when Earth and Mars had swung into line again, the rockets would be touched off once more and the sky ship would be homeward bound, loaded with precious photographs and notes.

Astronomers differ about Mars. One next outer neighbor may be a sterile, almost waterless desert, almost to the human race; or it may be a perfected world where civilization millions of years ahead of our own. In that case, the chances are that the inhabitants of Mars possess unthinkably powerful telescopes which would make it easy to see the sky in the sky above them.

They might feel justified in taking a shot at it with some sort of gun or rocket or deadly ray. If the Martians are millions of years ahead of us in progress, it is to be assumed that they have long since exterminated their last disease microbe.

He bent his head over some papers on his desk in a misery of embarrassment, while his eyes and the upturned back of his neck went from red to purple.

Sylvia dropped on a footstool near his feet. "Raymond," she said. "I'm sorry. You were right in what you said. You're kind and good and care what happens to me."

His fat frame trembled as though threatened with dissolution. He ducked his head and then down over the desk and spoke in a muffled voice. "Better make conversation on the Dominion Flyer. When I was in Montreal, in 1912, the Beneficence was better than you get in Paris."

Sylvia looked at him, burrowing among his papers to hide the shame of his goodness and softness. She rose from the footstool and walked softly out of the room, almost blinded by tears.

At five-thirty she passed through the big front door and smiled good night to the braided doorman. Fifty-seventh Street was thronged with the soft light and the Spring-like air that sometimes steals as temptations into New York January evenings.

A woman in black, with the traditional tailored hat and long cape of the smart matron-of-the-house, was standing near the door, looking intently at the gown displayed in Raymond's window.

"Good night, Miss Barton," said the doorman, touching his ornate cap. The woman by the window glanced up for a moment and looked at Sylvia.

Sylvia ran to catch a bus and the woman turned from the window and walked away.

It was a long ride home and Sylvia lay in her seat and a top of the bus. There might be a call from Spencer Devlin when she reached the apartment, or a call from David King.

To Be Continued Next Sunday.
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Mars just as the red planet gets there.

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Astronomers differ about Mars. One next outer neighbor may be a sterile, almost waterless desert, almost to the human race; or it may be a perfected world where civilization millions of years ahead of our own. In that case, the chances are that the inhabitants of Mars possess unthinkably powerful telescopes which would make it easy to see the sky in the sky above them.

They might feel justified in taking a shot at it with some sort of gun or rocket or deadly ray. If the Martians are millions of years ahead of us in progress, it is to be assumed that they have long since exterminated their last disease microbe.

He bent his head over some papers on his desk in a misery of embarrassment, while his eyes and the upturned back of his neck went from red to purple.

Sylvia dropped on a footstool near his feet. "Raymond," she said. "I'm sorry. You were right in what you said. You're kind and good and care what happens to me."

His fat frame trembled as though threatened with dissolution. He ducked his head and then down over the desk and spoke in a muffled voice. "Better make conversation on the Dominion Flyer. When I was in Montreal, in 1912, the Beneficence was better than you get in Paris."

Sylvia looked at him, burrowing among his papers to hide the shame of his goodness and softness. She rose from the footstool and walked softly out of the room, almost blinded by tears.

At five-thirty she passed through the big front door and smiled good night to the braided doorman. Fifty-seventh Street was thronged with the soft light and the Spring-like air that sometimes steals as temptations into New York January evenings.

A woman in black, with the traditional tailored hat and long cape of the smart matron-of-the-house, was standing near the door, looking intently at the gown displayed in Raymond's window.

"Good night, Miss Barton," said the doorman, touching his ornate cap. The woman by the window glanced up for a moment and looked at Sylvia.

Sylvia ran to catch a bus and the woman turned from the window and walked away.

It was a long ride home and Sylvia lay in her seat and a top of the bus. There might be a call from Spencer Devlin when she reached the apartment, or a call from David King.

To Be Continued Next Sunday.
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erobe and also lost their immunities to them. It would be fatal to let these earth-people, reeking with germs descend and infect them. They might think it a public necessity to destroy our ships in order to discourage thoughts of landing. This, in turn, might bring about H. G. Wells' idea of a war between the worlds. If so, they could perhaps exterminate the world's population with poison gas rockets, but we might counter with a few, filled with a chemical assortment of disease microbes.

Should Mars prove hostile or barren, Venus, next probably the most visited, hopping from orbit to orbit, would probably be the best place to go to far distant Neptune on the edge of the solar system, if the ship's crew did not die of old age or some other cause on the trip.

Of course, all steering in outer space must be done by storing rockets, placed at various points, or by changing the direction of the propulsion rockets. The return to Earth would probably be more hazardous than the going away. Hanging down at a speed like a meteor, the car would be in to get white hot from friction at the upper levels of the atmosphere.

To prevent this, rockets would be fired from the front end, as brakes. Possibly the control of the explosive might be so perfected that the car could be brought to a gentle rest on the bosom of the ocean. More likely it would have to be abandoned many miles up in favor of a life-line, which would be a wings and capable of coming to earth like an ordinary aeroplane.

If artificial planets are found to be habitable, it might be decided to let the Communists have one and the life-line, which would be a wings and capable of coming to earth like an ordinary aeroplane.

Another and perhaps a third way for a penal settlement where murderers and other criminals could enjoy a world, free from

annoyance by policemen and see how they liked it. On one of the trips, no doubt, time would be taken to look at the back side of our barren and frozen moon, not from any hope of practical results but just to see what she is hiding from us.

Conservative scientists say that man will never visit the other planets until he has learned to use the vast power supposed to be locked up within the atom. But equally learned men warned Langley and the Wrights that man would never fly until he had devised an engine so light and compact that our horsepower could be confined in a watch case.

For over fifty years, physicians have recommended it and numbers all over the world have recognized this new old medicine as the standard remedy for those ailments, such as indigestion, nervousness, indigestion, feverishness, no appetite or energy, etc. Children love the rich, fruit taste of California Fig Syrup and their whole system benefits from its gentle influence. It quickly purges the child's system of all waste, cleanses the bowels and stomach, and gives those organs tone and strength so they continue to act normally, of their own accord.

A New York City mother, Mrs. Geo. Alston, 200 East 16th St., says: "I gave it four months and the picture of health. That proves my idea of giving him California Fig Syrup for all his colds and little upset spells is right. He's never cross and fidgeting again. I give him a regular dose. It gives him a good appetite, and regulates his bowels. I can't say enough for it."

See that the Fig Syrup you buy bears the name of children, so you'll get the genuine. Four million bottles used a year show its popularity.

PARKER'S HAIR BALM
RESTORES COLOR AND BEAUTY TO GRAY AND FADED HAIR
60¢ PER OZ. at all druggists
LUXURIOUS RESTAURANT
FISH MARKET, N.Y.
Wholesale and Retail Dealers
LONDON, ENGLAND
LONDON, ENGLAND
LONDON, ENGLAND

Germ on hands endanger health, say nurses
With the season of winter sickness here, nurses are everywhere warning against the danger of germ-laden hands. Many diseases, they agree, are implanted in our system by germs carried from hand to mouth. It is for this reason that nurses advise washing hands often, always before meals, using Lifebuoy, the toilet soap with an antiseptic touch.

"... and Lifebuoy's antiseptic lather was a big help," says Mrs. Frank V. Nickels

"YES, it does seem marvelous that I haven't had a sick day in my home in so many years," exclaimed Mrs. Nickels when we visited her.

"But you see," she added, "we've used Lifebuoy all that time—and Lifebuoy always is a big help in keeping away illness."

"Both my husband and I are loyal Lifebuoy fans. I find it excellent as a complexion soap and my husband says that a Lifebuoy shower is just like a tonic."

"As for the children, I've naturally made Lifebuoy the rule for them, too. Frank is now five and Tom three—and I've never seen two boys pack more fun in mischief into one day than they. But no matter where they play, or how dirty they get themselves, I always feel they're safe after they've

had a sudsy washup in Lifebuoy's antiseptic lather."

—Mrs. Frank V. Nickels, 40 W. Alameda Road, Lansdowne, Philadelphia, Pa.

Use this health-guarding toilet soap
Mrs. Nickels's experience is typical of the way countless mothers all over the country use Lifebuoy to help them keep sickness out of their homes.

Are you denying your family so vital a means of health protection? Hands can't escape germs. Just think of the many things you and your children must touch daily on which other hands may have left germs—such as money, doorknobs, telephones.

The Life Extension Institute lists 27 germ diseases that hands may spread. Why take chances, when Lifebuoy's mild antiseptic lather removes germs? Keeps the skin healthier, too—prevents chapping.

Your family has to wash with some toilet soap anyway, so why not use Lifebuoy which gives added health protection—at no extra cost? You'll quickly learn to love Lifebuoy's pleasant extra-clean scent which tells you it purifies. It vanishes as you rinse. Adopt Lifebuoy as your regular toilet soap today.

LEVER BROS. CO., Cambridge Mass.



Dick's Mother Has Right Idea

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LIFEBUOY

HEALTH SOAP
Removes Germs - Protects Health

Bright-red and sturdy—full of fun and safety—the new soap is the kind of a new soap that you need. Lifebuoy's healthy and happy.



What a cigarette meant there

20 degrees below,
and no tobacco, through lonely weeks of glittering silence. Then a speck on the hard, bright horizon; another musher, outward-bound... and cigarettes! What price cold or Arctic hardship then!

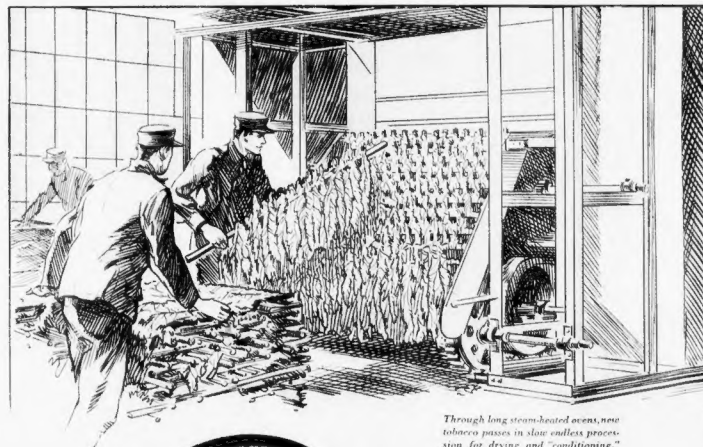
What a cigarette means here

220 degrees above,
as endless belts carry the choice tobacco for Chesterfield inch by inch through the great steel ovens.

Here, in penetrating heat, science corrects and perfects the curing commenced in the farmer's barn. Dried, then cooled, then steamed to exact and uniform heat and moisture, the tobacco is ready for the final mellowing—two long years ageing in wood—that only Nature can give.

Man, Science, Nature—all work together on Chesterfield. And in the bland, satisfying smoothness of Chesterfield itself is ample proof that their patient, costly team-work is good!

Liggett & McCarty Tobacco Co.



Through long steam-heated ovens, new tobacco passes in slow endless procession for drying and "conditioning."

Chesterfield

MILD enough for anybody... and yet **THEY SATISFY**